| Bk1       | <ul><li>R: Mental operations</li><li>C: Revision and practice: numbers 0 to 10</li></ul>  | Lesson Plan  |
|-----------|---|--|
|           | E: Roman numerals   | 65   |
| Activity  |   | Notes  |
| 1         | <ul> <li>Mental operations</li> <li>Look carefully around the classroom</li> <li>a) Who can make up a 2-member addition to 10 about the classroom?</li> <li>e.g P<sub>1</sub> says, '3 windows +1 door' and T writes on BB: 3 + 1 = 4</li> <li>P<sub>2</sub> says, '2 boards + 4 tables' and T writes on BB: 2 + 4 = 6</li> <li>Repeat for 3-member additions to 10.</li> <li>b) Who can say what I am doing as a subtraction?</li> <li>e.g. T calls out 9 Ps to front of class and then asks 4 to sit down.</li> <li>T arranges draws 5 dots on BB and then rubs out 3 of them.</li> </ul> | Whole class activity At speed Involve several Ps Agreement, checking e.g. BB: $9-4=5$ $5-3=2$ Discussion, agreement, |
|           | Who can make up a subtraction of their own? Is he/she correct?  5 min   | praise. Involve several Ps.  |
| 2         | Poster 8  Look at this poster. How many zebra crossings can you see?  Show me with number cardsnow! (10)  Let's check by counting while <b>A</b> points. (1, 2, 3,, 10)  Are all the crossings the same? (No, they point in two directions: ♣, ↔)  Show with a number card how many point in each direction. (5) + (5)  | Make sure Ps lay out cards in correct order on desk first before holding them up Praising  BB: 5 + 5 = 10            |
|           | Show with a number card how many point in each direction. $(5) + (5)$ $10 \text{ min}$  | DD: 3+3=10   |
| 3         | <ul> <li>Read: a) Write in the box below each picture the number of shapes it contains.</li> <li>b) Colour blue the boxes which have even numbers. Colour red the boxes which have odd numbers.</li> <li>c) Fill in the missing numbers. Each sum must equal 10</li> </ul>  | Individual work, monitored Discussion, checking b) BB: odd even 7, 3, 9 4, 10 c) Discuss solutions and write on BB   |
| Extension | Review with whole class, dealing with one part at a time.  How many pairs and how many remainders are in each picture?  Ps come to front to circle the pairs while Ps do same in their books.   | Whole class activity Use enlarged copy master or OHP.  |
| 4         | Interlude Song or rhyme  22 min  22 min   | Whole class in unison  |
| 5         | Book 1, page 65  Q.2 a) Read: Write the correct numbers from 0 to 10 below the number line.  Let's all read out the numbers in increasing (decreasing) order.  b) Read: Join up the pairs of numbers which together make 10.  Review with whole class.  | Individual work, monitored  At speed in chorus Individual work, monitored Discussion, checking                       |
| 6         | Roman Numerals  Who can come and write these numbers as Roman numerals?  (Use the numbers beneath the number line in Activity 5)  BB: I II III IV V VI VII VIII IX X  35 min  | Whole class activity Discussion, agreement Class read aloud forwards and backwards in chorus                         |

| Bk1      |   | Lesson Plan 65   |
|----------|---|--|
| Activity |   | Notes  |
| 7        | Book 1, page 65 Q.3 Read: Fill in the missing numbers.  | Individual work Discussion   |
|          | Deal with one part at a time. Review with whole class, checking on individual number lines or with counters/cubes.  | Agreement, checking, correcting  |
|          | Listen carefully. Follow what I am saying on your number line and show me the answer with a number card.  T gives more complicated instructions: e.g. $4 + 2 - 1 + 3 + 1 - 5 = ?$ | T speaks very slowly.  |
|          | Show me the number you ended up at now! (4)  Repeat for other combinations. (Ps can give instructions to class too.)  | Ps follow instructions, pointing to numbers on their number lines 0–9. |
|          | Elicit that when adding, you move to the right along the number line and when taking away you move to the left.   | Discussion, demonstration  |
|          | 45 min  |  |

| Bk1      | R: Operations C: Revision and practice (0 to 10) E: Logic problems  | Lesson Plan<br>66   |
|----------|---|---|
| Activity |   | Notes   |
| 1        | <ul> <li>Logic set</li> <li>a) Lay out on your desk all the black shapes from your logic set. How many are there? (10)</li> <li>Hold up the shape I am describing from the black set:</li> <li>e.g. small black triangle, large black square, large black shape which has the most number of sides (hexagon), small black shape which has 5 sides (pentagon), etc.</li> <li>b) Now gather up all the cards in a pile and this time lay out on your desk all the triangles and squares in your logic set.</li> </ul> | Whole class activity Ps can work in pairs if desks not large enough. T sticks shapes on BB too. Discuss names of shapes and number of sides each has.  Monitoring |
|          | How many are there? (8) <b>A</b> , stand up and describe one of your shapes to the class.  Everyone show me <b>A's</b> shape. <b>A</b> , are they correct?  15 min  | T sticks shapes on BB too. Repeat with several Ps Discussion, agreement   |
| 2        | Book 1, page 66 Q. 1 Read: There are 9 apples on the plate. Four are green and the rest are red. a) Colour in the apples. b) Fill in the missing numbers.   | Individual work, monitored  |
|          | You have 3 minutes to do this. Let's see who can finish first! <b>B</b> , how many apples did you colour red? (5) Is he/she correct? etc. <b>C</b> and <b>D</b> , come and fill in the equations on the BB. Are they correct?  Who thinks another number? Why? etc.   | Drawn on BB or use enlarged picture or OHP.  Discussion, checking  BB: 4+5=9 9-4=5  |
| 3        | Interlude Relaxation  22 min  | Whole class resting   |
| 4        | Book 1, page 66  Q.2 Read: Fill in the missing numbers.  See how many you can do in 8 minutes!  You can use your number lines to help you.  Review orally round the class.  | Individual work  Monitored  Correcting against number line or using counters, etc.  |
| 5        | <ul> <li>Book 1, page 66</li> <li>Q.3 Look at the picture. W, come and point to the shapes going into the machine. Where are they in the table?</li> <li>X, come and point to the shape coming out of the machine. Where is it in the table?</li> <li>Y, come and point to the column which has all the numbers filled in. Which numbers are going into the machine? (3, 5) What number is coming out of the machine? (8)</li> <li>Who can tell me what the machine is doing? (adding the two</li> </ul>            | Whole class activity Drawn on BB or use enlarged copy master or OHP.  Discussion, agreement  BB: 3 + 5 = 8  |
|          | numbers going in and sending out their sum)  Who can come and write down the rule?  Z, come and fill in the missing number in this column. Is he/she corect? Who thinks another number? Let's check.  Continue until all the columns are completed.  40 min —   | Or done as individual work, monitored then reviewed with whole class.   |

| Bk1      |   | Lesson Plan 66   |
|----------|---|--|
| Activity |   | Notes  |
| 6        | <ul> <li>Read: Underline the incorrect answers.         Write the correct answers in the boxes.         Review with whole class, asking Ps to check answers on their number lines.         The correct answer for incorrect equations could be demonstrated on the class number line, or with Ps at front of class (e.g. 3 girls + 5 boys = 8 children).</li> </ul> | Individual work  Discussion, agreement, checking, self-correcting  T writes each on BB too.  e.g. $3+5=9$ 8  BB: $3+5=8$ $3+5\neq 9$ |

| D1-1     | R: Mental operations  | Lesson Plan  |
|----------|---|--|
| Bk1      | C: Revision and practice (0–10)  E: Problems in context   | 67   |
| Activity |   | Notes  |
| 1        | Problem   |  |
| 1        | Listen very carefully, picture the story in your head, and show me the answer with a number card when I say.  | Whole class activity                                       |
|          | In a drawing competition, 4 pupils used watercolours, 2 pupils used crayons and 3 pupils used coloured pencils.   | T repeat slowly a few times                                |
|          | How many pupils have I mentioned altogether?  Show me with a number card now! (9)   | Discussion, reasoning                                      |
|          | Who can explain to the class how they got their answer?   | BB: $4 + 2 + 3 = \square$<br>4 + 2 + 3 = 9                 |
|          | 5 min   |  |
| 2        | Book 1, page 67   |  |
| _        | Q.1 Read: What has happened to the tub of 10 strawberries?  Complete the equations.   | Drawn on BB or use   |
|          | Look carefully at the picture. Who can tell a story about it?   | enlarged picture or OHP Ask several Ps                     |
|          | (e.g. There were 10 strawberries in the tub. Mum took out 3 strawberries and put them on Anne's plate. Then she took 4 more strawberries from the tub and put them on John's plate.)                    | Discussion with whole class about different contexts.      |
|          | How many strawberries are left in the bowl? (3)   |  |
|          | Now complete the equations.   | Individual work  |
|          | Review answers, making sure Ps know what each number in   | BB: $10 - 3 - 4 = \boxed{3}$                               |
|          | each equation refers to in the picture (especially the '3's).   | 10 – 4 – 3 = 3   |
| 3        | Book 1, page 67, Q.2  | Whole class activity                                       |
|          | Look at the picture. What shape is going into the machine? (square) What shape is coming <b>out</b> of the machine? (triangle) Look at the table. When the square equals 4, the triangle equals 1, etc. | Drawn on BB or use enlarged picture or OHP                 |
|          | What do you think the machine has done to the numbers going in? (It has taken away 3.)  | Discussion, agreement<br>Checking                          |
|          | <b>A,</b> come and fill in one of the missing numbers. Is he/she correct? Who thinks it should be another number? Why? etc.   | Discussion, agreement, checking                            |
|          | Continue until all columns are completed.   | Ps write in their books too.                               |
|          | Who can come and write down the rule for the triangle (square)? Who thinks something else? Let's check which is correct.  | BB: $\triangle = \square - 3$<br>$\square = \triangle + 3$ |
|          | 25 min  |  |
| 4        | Interlude   |  |
|          | Song, rhyme   | Whole class in unison                                      |
| 5        | Book 1, page 67   |  |
| -        | Q.3 Read: Join each sum to the correct point on the number line.  | Individual work  |
|          | Review with whole class, showing each on class number line.<br>Which number has two statements joined to it? (3)  | Discussion, checking                                       |
|          | Who can tell me another statement which would make '3'?   | Ask several Ps   |
|          | Q.4 T explains task first. Put a tick in the box if the equation is correct. Underline wrong answers and write the correct answer in the box. Deal with one column at a time.                           | Individual work, helped                                    |
|          | Review orally round the class, checking on class number line.   | Or demonstrate with Ps at front of class                   |
|          | 45 min —  |  |

| Bk1      | R: Mental operations  C: Revision and practice (0 to 10)  E: Rules (functions)  | Lesson Plan<br>68  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | Mental Practice  T asks P an addition or subtraction. If P answers correctly, then he/she asks the next addition/subtraction.  5 min  | Whole class activity, at speed Involve several pupils  |
| 2        | Logic set  A hides shape under desk. Ps ask questions to determine which it is.  A can answer only 'Yes' or 'No' (with T's help). First P who identifies correct shape hides another shape, etc.  | Whole class activity T repeats unclear questions correctly. Keep a good pace. Praising all contributions   |
| 3        | <ul> <li>Book 1, page 68</li> <li>Q.1 Revise meaning of 'odd' and 'even'.</li> <li>a) T reads out question and Ps draw dots on number line.</li> <li>Review orally. How can we write this using numbers/signs?</li> <li>Similarly for parts b) and c).</li> </ul>   | Individual work Show answers on number line Discussion, self-correcting BB: a) 4, 6, 8, 10 > 3 b) 6 < 7 < 8 c) 5 < 7 < 9   |
| 4        | Interlude Relaxation  | Whole class resting  |
| 5        | <ul> <li>Read: Fill in the missing numbers.</li> <li>Deal with one column at a time. Review orally round the class, correcting mistakes against the number line and writing on BB.</li> </ul>   | Individual work  Discussion, checking Self-correcting  |
| 6        | Book 1, page 68, Q.3  Look at the first puzzle. We start at the middle number and follow the arrows. B, come and put your finger on 10 and read out what is happening along the top left-hand arrow. ('ten minus 4 equals 6')  Who can come and fill in the missing number on another arrow?  Read out the equation on your arrow. Is he/she correct? etc.  Repeat until all arrows are completed.  | Whole class activity Drawn on BB or use enlarged copy master or OHP Ps write iin their books too. BB: $10-4=6$ $3+0=3$ $10-8=2$ $3+7=10$ $10-2=8$ $3+5=8$ $10-1=9$ $3+5=8$ |
| 7        | Read: Complete the table. Write the rule in different ways.  Look at the table. What are these shapes? (T points) (heart, flower)  Look at the first two columns in the table. When the heart is 2, the flower is 6, etc. Think about what is happening to the heart to get the flower. Now fill in the missing numbers in the table.  Review numbers in table at BB with whole class.  Who can come and write the rule for the flower?  Is he/she correct? etc. Let's all check it on the table.  'six equals two plus four', 'nine equals five plus four', etc.  Similarly for the heart. 'two equals six minus four', etc.  What number do we get if we take away the 'hearts' from the 'flowers'? (4)  So the rule can be written down in 3 different ways. (BB)  Let's all read them. 'a flower equals a heart plus four' etc. | Drawn on BB or use enlarged copy master or OHP  Individual work, monitored  Discussion, agreement  BB:   |

| Bk1      | R: <b>C: Rev</b> i | sion Test (0 to 10)  | Lesson Plan                               |
|----------|--------------------|--|---|
| Activity |                    |  | Notes                                     |
|          | This lesson w      | ill be a test to see what you have learned.                      | Ps may use number lines                   |
| 1        | Book 1, page       | 69   |   |
|          | Q.1 Read:          | Fill in the missing numbers.                                     | Individual work (6 min)                   |
|          |                    | a) 4, 1, 5, 6 (4)  | Checking (2 min)                          |
|          |                    | b) 6, 3, 1, 5 (4)  | 12 marks                                  |
|          |                    | c) 8,5,1,6 (4)   |   |
| 2        | Book 1, page       |  |   |
| -        | Q.2 Read:          |  | Individual work (6 min)                   |
|          | <b>~</b> 1.000.    | a) 3,6,5, 2 (4)  | Checking (2 min)                          |
|          |                    | b) 2,9,3,7 (4)   | 8 marks                                   |
|          |                    | 17min  |   |
| 3        | Book 1, page       |  |   |
|          | Q.3 Read:          | Fill in the missing numbers.                                     | Individual work (4 min)                   |
|          |                    | a) 3 (1)   | Checking (1 min)                          |
|          |                    | b) 5 (1)   | 4 marks                                   |
|          |                    | c) 8 (1)   | 4 marks                                   |
|          |                    | d) 6 (1)   |   |
|          |                    | 22 min   |   |
| 4        | Interlude          |  |   |
|          | Relaxation         |  | Whole class resting                       |
|          |                    | 24 min   |   |
| 5        | Book 1, page       | 69   |   |
|          | Q.4 Read:          | Fill in the missing numbers.                                     | Individual work (4 min)                   |
|          |                    | Top row: $2, 4, 10$ (3)  | Checking (2 min)                          |
|          |                    | Bottom row: 1,7,9 (3)  | 6 marks                                   |
|          |                    | 30 min   |   |
| 6        | Book 1, page       | 69   |   |
|          | Q.1 Read:          | Write down the answers.  Mark them with dots on the number line. | Individual work (10 min) Checking (5 min) |
|          |                    | a) (1)   |   |
|          |                    | correct position on number line (1)                              | 10 marks                                  |
|          |                    | b) $\triangle: 4, 5, 6, 7$ (4)                                   |   |
|          |                    | correct positions on number line (4)                             |   |
|          |                    | 45 min   |   |

**TOTAL: 40 marks** 

| 3k1      | <ul> <li>R: Operations (0 to 10)</li> <li>C: Recognise and distinguish shapes: circle, triangle, square</li> <li>E: Logic problem</li> </ul>  | Lesson Plan<br>70  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | Logic set  a) Lay out on your desk all the squares in your logic set.   | Individual work (or in pairs)  |
|          | How many squares are there? (4) b) Separate them into 2 groups. <b>A</b> , how did you make your 2 groups? (e.g. small and large) Who did the same as <b>A</b> ?  | Monitored  BB: small + large 2 + 2   |
|          | Who did something different? (e.g. black or white)  | black + white  |
|          | What can you say about all the squares? (e.g. 4 sides, straight lines, all sides are the same length)   | 2 + 2<br>Ask several Ps  |
|          | 10 min  |  |
| 2        | <ul> <li>Book 1, page 70</li> <li>Q.1 Read: Make different sequences, starting with these 3 elements.</li> <li>What is the first (2nd, 3rd) shape? (square, triangle, circle)</li> </ul>  | Whole class introduction   |
|          | How many lines do we have to draw to make them? (4, 3, 1) What kind of lines? (straight, straight, curved) See what different sequences you can draw. Ask several Ps to read out their sequences, e.g. 'square, triangle, circle, circle; square, triangle, circle' 'square, triangle, circle, triangle; square, triangle, circle,' | Discussion Individual work, monitored T helping where necessary T draws each on BB Praising only       |
|          | 20 min  |  |
| 3        | Lay out on your desk a sequence of 10 shapes so that each shape differs from the one before in only <b>one</b> way.   | Individual work (or in pairs)  Monitored   |
|          | B, read out your sequence. Class, shout out 'boo' when an element is wrong. Who can tell B why it is wrong?  Clap your hands if B's sequence is correct.  30 min  | T sticks shapes on BB as<br>they are read out.<br>Discussion<br>Praising                               |
| 4        | Interlude   |  |
| •        | Song or rhyme 32 min  | Whole class in unison  |
| 5        | <ul> <li>Book 1, page 70</li> <li>Q.2 T revises names of each shape, then explains the task.</li> <li>Deal with one part at a time.</li> <li>Review at BB with whole class. What do the numbers in part b) refer to? (BB: 1 red + 2 blue + 1 red + = 10 shapes)</li> <li>What shape is 3rd from the right? (blue square)</li> </ul> | Individual work, monitored, helped Drawn on BB or use enlarged copy master or OHP Discussion, checking |
|          | Where is there a red triangle? (e.g. 1st from left) etc.  | Praising   |

# Bk1

#### Lesson Plan 70

## Activity

6

#### Book 1, page 70, Q.3

T explains task. Look at the puzzle carefully.

- Let's look first for groups with all 3 shapes the same.
  A, come and point to one. (squares) Are there any more? (No)
  Which 3-member addition for 9 has all numbers the same?
  B, come and fill the numbers in the squares.
- Now let's look for groups which have 2 shapes the same. C, come and point to one. Are there any more? (3 in all)

Look at them carefully. Which shape is there most of? (hexagon) **D**, come and point to them. How many are there? (3)

Now let's write down all the 3-member additions for 9 which have 2 numbers the same. (T writes on BB suggestions from Ps) Remember that we have used '3' already and we can't use zero.

Which number occurs 3 times? (1) So the hexagon should be '1'. E come and fill in all the hexagons.  $\land$ 

- What shape can we work out now? (e.g. star)

  F, come and fill in the star.
- What other shape can we work out? (e.g. triangle) **H**, come and fill in the triangles.



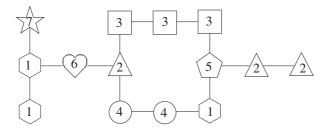
- What other shape can we work out now? (e.g. heart)
   I, come and fill in the heart.
  - Which shape is left? (pentagon)

    J, come and fill in the pentagon.

    e.g.

N.B. If this is too difficult, give  $\sqrt{\phantom{a}} = 7$  at the beginning and the rest follows on directly.

Final solution:

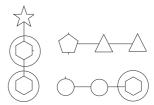


### Notes

Whole class activity
Allow Ps time to think



BB: 3 + 3 + 3 = 9so = 3



BB: 7 + (1) + (1) = 9 5 + 2 + 2 = 94 + 4 + (1) = 9

BB:  $\bigcirc + \bigcirc + 1 = 9$ so  $\bigcirc = 4$ 

BB: 
$$3 + \sqrt{\phantom{0}} + 4 = 9$$
  
so  $\sqrt{\phantom{0}} = 2$ 

BB:  $1 + - \bigcirc + 2 = 9$ so  $- \bigcirc = 6$ 

BB: 
$$\bigcirc +2+2 = 9$$
  
so  $\bigcirc = 5$ 

Drawn on BB or use enlarged copy master or OHP

Involve as many Ps as possible

Or can be done as individual work or in pairs.

| Bk1      | <ul> <li>R: Operations</li> <li>C: Recognise and distinguish shapes: circle, triangle, square</li> <li>E: Problems in context</li> </ul>  | Lesson Plan<br>71   |
|----------|---|---|
| Activity |   | Notes   |
| 1        | Constructing shapes  Build these shapes from unit sticks (rods). Count the sticks you used.  Which unit shape and how many of them have we used?  a)   C  C  C  D  D  D  D  D  D  D  D  D  D  | Shapes drawn on BB or use enlarged copy master or OHP Ps work in pairs first, then whole class activity T monitoring, helping |
|          | b)  | Discussion at BB about shapes  Deal with parts a), b), c), d), one at a time.  Can be differentiated                          |
| 2        | <ul> <li>Read: Write additions about the number of sides of the shapes.</li> <li>Deal with each part separately. Review at BB with whole class.</li> <li>How many vertices (corners) does each shape have?</li> <li>(Same as the number of sides)</li> </ul>  | Individual work, monitored Discussion, checking BB: $3+4=7$ $3+3+4=10$ $5+4=9$ $3+6=9$ Praising                               |
|          | 20 min  |   |
| 3        | Interlude Song, rhyme, exercises 22 min   | Whole class in unison   |
| 4        | <ul> <li>Read: Draw squares of different sizes on the grid below.  Write in the middle of each square the number of unit squares you used.  What is imporant to remember about a square? (4 sides, all straight lines and all the same length)  Review with whole class. A, tell me the number of unit squares you used for one of your squares. (e.g. 4)  Who has a different number? etc. T writes out in order on BB.</li> </ul> | Individual work Monitored, helped Discussion  BB: 1, 4, 9, 16, (25)   |
|          | Which numbers are missing? (e.g. 3) Is it possible to make a larger square with this number of unit squares? (No)  30 min   | Checking, agreement   |
| 5        | <ul> <li>Read: Show, by colouring the unit triangles, different ways of making larger triangles.</li> <li>Colour a different triangle in each picture.</li> <li>Review with whole class. Ps come to BB to show one of their triangles. How many unit triangles have been coloured in each?</li> </ul>   | Individual work, monitored, helped Grids drawn on BB or use enlarged copy master or OHP BB:  4 4 9                            |
| 6        | Book 1, page 71  Q.4 Read: Colour in these shapes on the grid.  Review at BB with whole class.  Write an addition about the unit squares you have coloured.  45 min   | Individual work  Grid drawn on BB or use enlarged copy master or OHP  BB: 3 + 2 + 6 = 11  R B G                               |

| Bk1      | <ul> <li>R: Triangle, square, circle</li> <li>C: Recognise and distinguish shapes</li> <li>E: Spatial awareness</li> </ul>  | Lesson Plan<br>72  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | <ul> <li>Making shapes</li> <li>Have ready for each P (or pair of Ps)</li> <li>sheet of paper with larger shape outlined (circle, square, rectangle, triangle or hexagon)</li> <li>an envelope with coloured shapes (some envelopes with unit squares, some with triangles, some with hexagon segments and some with circle segments of different sizes) to match larger shapes</li> <li>Cover the large shape with the unit shapes and count how many units you used.</li> <li>Each P tells class what shape they made and number/shape of units used.</li> </ul>  | Individual work (or pairs)  Monitored, helped Copy masters (Shape A) photocopied onto coloured card and cut out.  Copy master (Shapes B)  Discussion at BB Checking                |
|          | 10 min  |  |
| 2        | <ul> <li>Building solids</li> <li>Ps have unit cubes on desks. T builds a solid and talks about it.</li> <li>T: Everyone build a solid using 7, 8 or 10 cubes. Try to be different from your neighbour.</li> <li>A, how many columns does your solid have? Who has more (less)?</li> <li>B, how many unit cubes are in your tallest (smallest) column?</li> <li>Who has a column with more (fewer) cubes?</li> <li>If no P has done it, T builds a larger cube from 8 unit cubes.</li> <li>How high is each column? (2 unit cubes) How many columns? (4)</li> <li>How many unit cubes altogether? (8)</li> <li>If we look at it from above, we can show how we built it on the BB.</li> <li>Each square represents a column. C, how many unit cubes are in this column? (2) Come and write it in the correct square.</li> <li>Repeat for other columns.</li> <li>Who else has built a solid with 4 columns? D, come and show us on the BB how you built your shape.</li> <li>Let's all try to copy D's solid.</li> <li>(Repeat with a P who used a different number of columns.)</li> </ul> | T demonstrating, explaining 'solid', column', Individual work, monitored Praise creativity  Discussion  BB: 2+2+2+2=8  2 2 2 2 2 1  With T's help e.g. 3 2 T helping 3 2  Praising |
| 3        | Interlude Song, rhyme, exercises  | Whole class in unison  |
| 4        | a) Book 1, page 72  Q.1 Read: These shapes have been built from unit cubes.  How is each shape made?  How many cubes does it use?  Ps can build solids on desk first before recording.  Deal with one part at a time. Review with whole class.  b) I have drawn this plan of a solid. See if you can build it on your desk with unit cubes.  Count how many unit cubes you have used and show me with a number card when I say. Show me now! (10)  E, come to the BB and explain how you got 10. Who agrees?  | Individual work  Monitored, helped  Discussion at BB. Solutions:  a) b) c)  2 1 3 2 2 3 1  2 1 1 1  BB: 3 2 1  Praising 1  BB: 3 + 2 + 1 + 2 + 1 + 1 = 10                          |

| Bk1      |   | Lesson Plan 72   |
|----------|---|--|
| Activity |   | Notes  |
| 5        | Book 1, page 72  Q.2 Read: Join up the names to the correct shapes.  Colour the rectangle red.  Review at BB with whole class.  40 min  | Individual work, monitored Drawn on BB or use enlarged copy master or OHP Discussion, checking |
| 6        | <ul> <li>Book 1, page 72</li> <li>Q. 3 T explains task.</li> <li>Colour the triangle red, the small squares blue, and the rectangle green.</li> <li>Draw something in your picture using another shape.</li> <li>Drawings reviewed with whole class.</li> </ul> | Individual work T monitoring, praising  Creativity encouraged Discussion                       |

| Bk1      | <ul> <li>R: Counting: Cardinal and ordinal numbers</li> <li>C: Calendar: days, weeks, months</li> <li>E: Numbers beyond 10</li> </ul>                                       | Lesson Plan<br>73   |
|----------|---|---|
| Activity |   | Notes   |
| 1        | <ul> <li>a) Months</li> <li>Who knows what this is? (T holds up real calendar with pictures)</li> <li>What does it show? (dates: months, days, weeks for a year)</li> </ul> | Whole class activity  |
|          | What is your favourite month? Why?  | Discussion  |
|          | T shows each month at a time and talks about the picture. Ps say the name of each month aloud.  | Encourage Ps to talk about dates special to them            |
|          | Hands up those born in January (February etc.) Let's recite all the names of the months in order: 'January, February,, December'  | In chorus, with T's help                                    |
|          | Let's do it again more quickly! How many months are there? (12)  b) Days of the week  | T notes those who are struggling                            |
|          | Who knows what day they were born on?   |   |
|          | T shows where the days are on calendar and what the numbers mean (e.g. 1 means 1st day, etc.). What date is this? (e.g. 10th)   | Discuss what happens on certain days                        |
|          | Let's all recite the days of the week in order.   |   |
|          | 'Monday, Tuesday,, Sunday' How many days are there? (7)   | In chorus   |
|          | What do 7 days make? (1 week) T shows weeks on calendar.  | Discussion  |
|          | 20 min  |   |
| 2        | Interlude Song or rhyme about the months of the year  22 min  | Whole class in unison                                       |
| 2        |   | 0   |
| 3        | Book 1, page 73, Q.1 What year is it now? Look at the calendar for 2018 in Book 1.  | Or can be done using a large calendar for the current year  |
|          | T explains abbreviations for days of week by covering the ends of name cards. Why is the complete name not written? (no room)   | or enlarged copy master or<br>OHP of calendar for 2018      |
|          | Everyone put your finger on January. What is the first (last) day in January? Which day is the 3rd (5th, 8th, 10th) of January?   | Ps tell class about anything special on these dates         |
|          | How many Mondays (Fridays) are in January?  |   |
|          | Everyone point to June on the calendar. What day will the 3rd (10th) of June be? How many Sundays (Tuesdays) will there be?   | If Ps have had birthdays                                    |
|          | Everyone point to your birthday on the calendar and see what day it will be. Whose is on a Monday, etc.?  | already, ask them to tell the class how they celebrated it. |
|          | Ps read the questions in their books andwrite the answers.  32 min  |   |
| 4        | Interlude Song about days of the week   | Whole class in unison                                       |
| 5        | Exercises 34 min  |   |
| 3        | a) Read: What date is it today? What day is it today?   | Individual work   |
|          | T writes on BB while Ps copy in their books. b) Read: What date is your next birthday? How old will you be?   | Monitored, helped   |
|          | T writes own birthday on BB and explains day, month, year.  Whose birthday is first in the year? Whose is the last?   | Discussion about youngest, oldest                           |
|          | These Ps write birthday dates on BB. Is he/she correct?  Who would like to write a special date on the BB?  Tell us why it is special.                                      | Ask several Ps  |
|          | 45 min  |   |

| Bk1      | <ul> <li>R: Counting: Cardinal and ordinal numbers</li> <li>C: Calendar: days, weeks, months, seasons</li> <li>E: Numbers beyond 10</li> </ul>  | Lesson Plan<br>74  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | <ul> <li>Revising days, months</li> <li>Let's all recite the days of the week. Can you do it backwards?</li> <li>Now let's say the months of the year. 'January,, December' Show me the answer to these questions with number cards.</li> <li>a) How many days are there in a week? Show me now! (7)</li> <li>b) How many months are there in one year? (12)</li> </ul> | Whole class activity At speed With T's help if necessary Make sure that Ps hold up 2-digit number in correct way by making on desk first |
| 2        | Book 1, page 74   |  |
|          | Look at the calendar (page 73) Everyone point to February.  Q.1 Read: a) How many days are there in February 2018?  Write it in the box.  | Individual work  It would be easier if Ps each had photocopied sheet of copy master  |
|          | b) How many months start with the letter J, M, A, O?  Write the number in the box beside each letter.  Review at BB with whole class.   | Discussion, checking Praising  |
|          | 15 min  | Traising   |
| 3        | <ul> <li>Book 1, page 74</li> <li>Q.2 T reads questions. Ps write down answers in boxes.</li> <li>Review with whole class. Ps come out to show the months on enlarged calendar or OHP.</li> </ul>   | Individual work  Monitored, helped  Discussion   |
| 4        | <ul> <li>Revise the meaning of 'yesterday', 'today' and 'tomorrow'.</li> <li>T reads questions. Ps write down answers in boxes.</li> <li>Review with whole class, checking against calendar.</li> <li>25 min</li> </ul>   | Individual work  Monitored, helped  Discussion   |
| 5        | Interlude Song or rhyme  28 min   | Whole class in unison  |
| 6        | Months  Look at the BB. The table lists the months of the year in order but some of them are missing. Who can come and fill in the gaps?  | Whole class activity   |
|          | BB: 1st month January 7th month   | Praising   |
|          | nd month Februaryth month August  |  |
|          | 3rd month th month September  | Discussion about the months  |
|          | 4th month th month October  |  |
|          | th month May 11th month   |  |
|          | 6th month   |  |
|          | Class, clap if the answer is correct. Wag your fingers if it is wrong.  | Agreement, checking  |
|          | <ul> <li>Book 1, page 74</li> <li>Q.4 T reads out question, one part at a time. Ps write down answer in their books. Review with whole class using table above or calendar.</li> </ul>  | Individual work, monitored Ps can use calendar sheet   |

| Bk1      |  | Lesson Plan 74   |
|----------|--|--|
| Activity |  | Notes  |
| 7        | <ul> <li>Read: Put the pictures in the correct order.  Write their numbers in the boxes.</li> <li>Review with whole class. Talk about how an apple tree grows: buds, flowers and small leaves appear, small apples growing to larger apples, fruit then leaves fall from tree, bare branches, then it all starts again the next year.</li> </ul> | Individual work, monitored Drawn on BB or use enlarged copy master or OHP Discussion, checking |
|          | Talk about the seasons: spring, summer, autumn, winter and what happens in them. (Refer to weather, plants, animals, people.)  45 min  | Whole class activity BB: spring, summer, autumn, winter  |

| Bk1      | R: Counting: Cardinal and ordinal numbers C: Calendar: days, week, months, seasons E: Numbers beyond 10  | Lesson Plan<br>75  |
|----------|--|--|
| Activity |  | Notes  |
| 1        | <ul> <li>Revision Practice</li> <li>T says a day (e.g. Monday) P answers with next day (e.g. Tuesday)</li> <li>T says a season (e.g. winter) P answers with next season (e.g. spring)</li> <li>T says a month (e.g. July) P answers with next month (e.g. August)</li> </ul>   | Whole class activity At speed Involve all Ps   |
| 2        | Look at these pictures. What season could it be? Why?  a) Poster 2 (summer or late spring: flowers, butterfly, no coats, eating outside so must be quite warm, etc.)  b) Poster 5 (possibly summer: trees have lots of leaves, bulrushes in flower, animals and birds with young which have grown quite big)  c) Poster 7 (probably autumn or early spring: wearing coats, wellingtons, but ice- cream van still going its rounds)  d) Poster 11 (winter: snow, water frozen over, everyone well wrapped up with gloves, scarves, hats, pink noses and cheeks)  15 min | Whole class activity  Discussion: e.g. beauty, dangers, seasonal fruits, vegetables, plants, hibernation, clothes worn in different seasons, gardens, countryside, winter sports, etc.  Encourage contributions from as many Ps as possible.   |
| 3        | Which month is this? (e.g. T holds up card showing 'January'.) Class shout out. T sticks on BB (in same position as in book). Which season is it in? (winter) Discuss official start/end dates A, come and find the card for winter and stick it on the BB. Continue until all months/seasons are on BB.  Q.1 Read: Join up the months to the matching seasons. Review at BB with whole class. Colour all the spring months green, the autumn months brown and the summer months orange. Which are left? (winter ones)   | Whole class activity Have names of months and seasons on coloured card. Discuss official meteorological dates for start/end of seasons Individual work, monitored Discussion, agreement Discussion about whether these colours are appropriate |
| 5        | Interlude Physical exercises  27 min   | Whole class in unison  |
| 6        | Book 1, page 75  Q.2 Read: Find each date on the calendar on page 73 and write in what day it will be.  When you have found the date on the calendar, circle it.  Try to write out the full name of the day.  Review with whole class. Talk about significance of these dates.  Repeat orally, with T or Ps saying other dates for class to find.  35 min  | Individual work, monitored It would be better if each P had photocopied sheet of calendar copy master Discussion, agreement Whole class activity, at speed   |
| 7        | <ul> <li>Book 1, page 75</li> <li>Q.3 T reads out questions. a) Ps count months on calendar first.</li> <li>b) Deal with one part at a time. Review orally around class. Mistakes corrected against class calendar.</li> <li>c) Repeat orally round class for other months too.</li> </ul>   | Individual work Discussion, agreement Whole class activity, at speed   |

| Bk1      |  | Lesson Plan 75  |
|----------|--|---|
| Activity |  | Notes   |
| 8        | <ul> <li>Book 1, page 75, Q.4</li> <li>Listen carefully to the question and find these dates on your calendar.</li> <li>a) Put one finger on Jim"s birthday which on the 2nd June. Put another finger on Tom's birthday which on the 7th June. Count how many days are in between and write it in the box. (4)</li> <li>b) Put one finger on Tom"s birthday which on the 7th June. Put another finger on Jane's birthday which on the 10th June. Count how many days are in between and write it in the box. (2)</li> <li>Review with whole class. What would have happened if we had done it as a subtraction? (7 - 2 = 5 and 10 - 7 = 3 would give wrong answers.) Why? (We have counted one of the actual birthdays, and not the days in between.)</li> </ul> | Ps have calendar sheet each  Class working together, following instructions  T repeats each part slowly  Discussion, demonstration on class calendar  Agreement |
|          | 45 min   |   |

| k1       | R: Counting: Cardinal and ordinal numbers  C: Months, weeks, days;  E: Numbers beyond 10  | Lesson Plan<br>76                          |
|----------|---|--|
| Activity | 2. 1  | Notes                                      |
| 1        | Number cards T says a month (e.g. June) Ps show ordinal number (e.g. 6) with number cards.  5 min   | Whole class activity At speed Praising     |
| 2        | Book 1, page 76, Q.1  |  |
|          | Look at the calendar. Let's count how many days are in each month.  T points to each day as Ps count. (1, 2, 3,, 31)  | Whole class in chorus                      |
|          | What is the highest number we counted to? (31)<br>How many months have 31 days? (7)   |  |
|          | a) Write down all the months which have 31 days in your books.  Try to write them out in order. Write down their positions too.   | Individual work<br>Monitored, helped       |
|          | b) What is the lowest number we counted to? (28) How many months have 28 days? (1)  | Individual work<br>Monitored, helped       |
|          | Write down its name and position.  c) How many days do the remaining months have? (30)  Try to write them out in order. Write down their positions too.   | Individual work Monitored, helped          |
|          | Review at BB with whole class.  | Discussion, agreement                      |
|          | Hands up those of you who have a birthday in a month with (30) 31 days.   | (or can be done as a whole class activity) |
|          | Talk about February which has 28 days most of the time but has 29 days every 'leap' year. (4th year)  | T could show a leap year calendar.         |
|          | Who knows someone born on 29th February? (In case no one, T should mention somebody.) Will they miss birthdays and be younger?  | Discussion                                 |
|          | 28 min  |  |
| 3        | Interlude Action song/rhyme30 min   | Whole class in unison                      |
| 4        | Writing dates   | Whole class activity                       |
|          | Who can tell me what is special about 14th February? (St. Valentine's Day)  | Discussion                                 |
|          | Let's write the date for St. Valentine's Day in 2016.  We can write dates using only numbers. Think about how we could write this date so that other people would know eactly what day we were meaning. | BB: 14th of February 2016                  |
|          | What number might we put first? (day) T writes '14'. What number might we put next? (month) T writes '2'. What do we need to put  | Ask several Ps                             |
|          | down to make sure it is not mixed up with another St. Valentine's Day? (year) T writes '2016'.  | Discussion, checking                       |
|          | We usually put a slash or a dot between the numbers to keep the day, month and year separate.   | BB: 14/2/2016<br>14.2.2016                 |
|          | Book 1, page 76   |  |
|          | Q.2 a) T reads out dates. Ps write in their books.  Review with whole class, with Ps coming to write on BB.   | Individual work  Discussion, checking      |
|          | b) Read: Which months are in the following dates?   | Discussion, checking                       |

| Bk1      | R: Numbers, clock C: Revision and practice (0–10)  | Lesson Plan  |
|----------|--|--|
|          | E: Numbers beyond 10   | 77   |
| Activity |  | Notes  |
| 1        | Posters 4 and 7  |  |
|          | Talk about each poster separately. What time of day do you think   | Whole class activity                               |
|          | it is? Why?  | Discussion   |
|          | Poster 4 girls are getting ready for bed, wearing pyjamas, one is already in bed, clock on wall shows 8 o'clock. light is on so must be dark outside so can't be morning.  | Involve several Ps                                 |
|          | Poster 7 clock shows 3 o'clock, children on holiday or parents have picked them up from school early, daylight so can't be in middle of night  |  |
|          | Ask Ps to talk about their own daily lives. When they get up, eat, etc.  | Involve several Ps                                 |
| 2        |  |  |
| 2        | Book 1, page 77  Talk about clocks first. Two hands, short and long, Long hand goes round once an hour. Short hand goes round once every 12 hours (i.e. twice a day, so there is a '9 o'clock' in the morning and also in the evening. This is shown by writing 9 am (morning) or 9 pm (evening) | Whole class discussion                             |
|          | Q.1 Read: Write the numbers on the clock.  | Individual work, monitored                         |
|          | Review at BB with whole class.   | Drawn on BB or use enlarged                        |
|          | Let's recite the numbers, starting from '1'. $(1, 2, 3,, 12)$  | copy master or OHP                                 |
|          | What time is this clock showing? (one o'clock)   | Discussion, demonstration                          |
|          | At o'clocks, the long hand always points to 12 and the short hand to the number of the hour.   |  |
|          | Who can come and draw in the hands pointing to:  | Use separate clocks for each                       |
|          | 3 o'clock (6 o'clock, 9 o'clock, 11 o'clock)?  | or use model or real clock                         |
|          | 20 min   |  |
| 3        | Interlude  | XXII 1 1   |
|          | Song, rhyme, relaxation  | Whole class in unison                              |
|          | 22 min   |  |
| 4        | Book 1, page 77  | Individual work                                    |
|          | Q.2 Read: What is the time on each clock?  | Monitored, helped                                  |
|          | Review at BB with whole class.   | Draw on BB or use                                  |
|          | Discuss the clock showing '12 o'clock'. Why can we see only one hand?  | enlarged picture or OHP or use model or real clock |
|          | I am going to tell you whether the time for each clock is in the   | disc infoder of rear crock                         |
|          | morning or evening. Write beneath each clock 'am' or 'pm'  | Individual work, reviewed                          |
|          | 30 min   |  |
| 5        | Book 1, page 77  | Individual work                                    |
|          | Q.3 Deal with one part at a time. Review with whole class  | Monitored, helped                                  |
|          | Show additions on BB.  | Discussion, checking                               |
|          | Demonstrate with a real clock or model if there are difficulties.  |  |
|          | 38 min   |  |
| 6        | Book 1, page 77  | Individual work, monitored                         |
| v        | Q.4 See how many of these you can do in 5 minutes.   | Discussion at BB                                   |
|          | Review with whole class. Mistakes corrected on number line.  | Checking, praising                                 |
|          | Or done orally round the class.  | At speed   |
|          | Or done orally round the class.  |  |

| Bk1       | R: Inequalities C: Revision and practice (0 to 10)   | Lesson Plan<br>78  |
|-----------|--|--|
| A 04:0:40 | E: Measurement: capacity   | , 0  |
| Activity  |  | Notes  |
| 1         | Measurement  | Whole class activity   |
|           | What kind of things can we measure and how do we measure them?  Talk about measuring time (calendar and clocks), length (rulers, measuring tape) weight (scales), area (with with unit shapes).  In this lesson we will measure capacity (or how much a container holds). Talk about various kinds of containers. (jugs, bottles, etc.)  | Encourage contributions from as many Ps as possible  Relate to their everyday lives  |
|           | 5 min  |  |
| 2         | Capacity   | Whole class activity   |
|           | a) Let's measure the capacity of this plastic bucket with this tumbler.  (Two Ps to front of class to demonstrate, with T's help)  e.g. BB: 9 tumblers < capacity of bucket < 10 tumblers  | Ps can keep tally at side of their books   |
|           | <ul> <li>b) Let's measure the capacity of this plastic bottle with this jam jar.</li> <li>(Another two Ps to demonstrate.)</li> <li>e.g. BB: 3 jam jars &lt; capacity of bottle &lt; 4 jam jars</li> <li>Do we know which holds more water, the bucket or the bottle?</li> </ul>   | Ps can keep tally at side of their books   |
|           | (No, we need to use the same unit of measure, e.g. the tumbler)  | Discussion   |
|           | Repeat b) using tumblers instead of jam jars.  e.g. BB: 6 tumblers < capacity of bottle < 7 tumblers.  Which holds more, the bucket or the bottle? (bucket)  | Ps can keep tally at side of<br>their books<br>Discussion  |
|           | 15 min   |  |
| 3         | <ul> <li>Book 1, page 78</li> <li>Q.1 Read: Fill in the missing numbers.</li> <li>Do the first equation on the BB with the whole class.</li> <li>Ps to BB to do each line. Check against number line.</li> <li>Ps do one column at a time, using their number lines to help them.</li> <li>Review each column with whole class.</li> <li>Mistakes corrected at class number line.</li> </ul> | Whole class do first equation  BB: $4 + \square = 6 + 3$ $4 + \square = 9$ $\square = 5$ Monitored, helped  Discussion, checking |
|           | 24 min   |  |
| 4         | Interlude Song or rhyme 26 min   | Whole class in unison  |
| 5         | Book 1, page 78, Q.2   | Whole class activity   |
|           | Everyone look at part a). <b>A</b> , come to the number line and put your finger on the '6'. <b>B</b> , come to the BB and be ready to write in the missing number or signs.   | Draw on BB or use enlarged copy master or OHP  |
|           | If we add a number, in which direction must <b>A</b> move? (to the right)  If we subtract a number which way must <b>A</b> move? (to the left)   | In unison  |
|           | Rest of class give instructions to <b>A</b> :' add 2', <b>A</b> moves finger 2 places to right and tells <b>B</b> to write in '8'. Repeat to '10'.   |  |
|           | C, come and put your finger on '10'. Move back to 8. What has C done? Class shouts 'taken away 2'. <b>D</b> , come to BB and fill in the box.  | Ps can follow on own number lines too  |
|           | Continue in similar fashion until all parts are complete.  |  |
|           | Let's all read the additions and subtractions, following with your fingers on your own number line.  | In chorus, at speed  |
|           | (Or done as individual work, reviewed at BB with whole class.)  35 min   |  |

| Bk1      |  | Lesson Plan<br>78   |
|----------|--|---|
| Activity |  | Notes   |
| 5        | <ul> <li>Read: Fill in the missing numbers</li> <li>Review with whole class. Deal with parts a) and b) separately.</li> <li>(Or can be done orally round the class.)</li> </ul>  | Individual work, monitored Checking against number line At speed  |
| 6        | Book 1, page 78, Q.3  T reads problem slowly once or twice while Ps fill in the boxes.  Who would like to come to the BB and tell us how he found the solution? Who agrees? Who did it another way?  What part of the problem is not important and can be ignored? (the 10 fish they caught) | Individual work  Discussion about best strategy for solution strategy  BB: 9 - 3 = 6  6 o'clock + 3 hours → 9 o'clock |
|          | 45 min   |   |

| DI-1     | R: Mental counting  | Lesson Plan   |
|----------|---|---|
| Bk1      | C: Revision and practice (0 to 10)  | 79  |
|          | E: Inequalities   | /9  |
| Activity |   | Notes   |
| 1        | Oral work   |   |
|          | Let's see how many different ways we can think of to describe the   | Whole class activity  |
|          | number 3 (8, 10).   | Class checks each response                                    |
|          | (e.g. 3: $1+2$ , $5-2$ , $10-4-3$ , the next number greater than 2,   | T writes all cases on BB                                      |
|          | the 2nd odd number, etc.)   | Praise creativity   |
|          | 5 min   |   |
| 2        | Logic sets  | Whole class activity  |
|          | A hides shape under desk. Ps ask questions to determine which it is.  A can answer only 'Yes' or 'No' (with T's help). First P who identifies | T repeats unclear questions correctly. Keep a good pace.      |
|          | correct shape hides another shape, etc.   | Praising all contributions                                    |
|          | 10 min  | Traising an contributions                                     |
| 3        | Book 1, page 79   | Individual work   |
|          | Q.1 T points out the two different kinds of arrows (single and  | Monitored, helped   |
|          | double) and explains what they mean.  | Discussion  |
|          | Now see how quickly you can fill in all the missing numbers.  | Drawn on BB or use enlarged                                   |
|          | Review at BB with whole class, correcting at number line.   | picture or OHP  |
|          | 20 min  |   |
| 4        | Interlude   |   |
|          | Song, verse, exercises  | Whole class in unison   |
|          | 22 min  |   |
| 5        | Book 1, page 79   | Individual work   |
|          | Q.2 Ps do one part at a time. Review orally round the class.  | Monitored   |
|          | Mistakes corrected at number line.  | Discussion, checking  |
|          | 32 min  |   |
| 6        | Book 1, page 79   | Individual work   |
|          | Q.3 Listen carefully and try to picture the story in your head.   | Discussion, agreement   |
|          | Draw the sweets and write down an addition in your book   | BB: $1 + 2 + 2 = 5$ sweets                                    |
|          | to help you.  | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$         |
|          | T reads problem several times. Ps work out answer. (2) Ask several Ps for their answer and strategy for solution.                             | $5-0 \neq 1$ $4-1 \neq 1$ $3-2 = 1$                           |
|          | Ask several is not their allower and strategy for solution.   | 3 071 7 171 3 2 =   |
|          | Demonstrate with 2 Ps and real sweets at front of class   | India has satur 🖸 sussats                                     |
|          | Demonstrate with 2 Ps and real sweets at front of class.  | Julie has eaten 2 sweets                                      |
|          | 40 min  | Julie has eaten 2 sweets                                      |
| 7        | Book 1, page 79   |   |
| 7        | Book 1, page 79  Q.4 Read: Where will the animals come out?   | Individual work   |
| 7        | Book 1, page 79  Q.4 Read: Where will the animals come out?  Draw their routes.   | Individual work Discussion on BB.                             |
| 7        | Book 1, page 79  Q.4 Read: Where will the animals come out?   | Individual work   |
| 7        | Book 1, page 79  Q.4 Read: Where will the animals come out?  Draw their routes.  Draw each animal's route in a different colour,              | Individual work Discussion on BB. Use enlarged copy master or |

| Bk1      | R:   | Lesson Plan<br>80   |
|----------|--|---|
| Activity |  | Notes   |
|          | This lesson will be a test to see what you have learned.   |   |
| 1        | Book 1, page 80  |   |
|          | Q.1 Read: Fill in even numbers in red and odd numbers in blue.   | Individual work (4 min) Checking (2 min)                                    |
|          | 1st sequence: correct numbers (3) correct colours (1)  | 8 marks   |
|          | 2nd sequence: correct numbers (3) correct colours (1)  |   |
|          | 6 min  |   |
| 2        | Book 1, page 80 Q.2 Read: Fill in the missing numbers and write in what the arrows mean. (8)  20 min             | Individual work (12 min) Checking (2 min)  16 marks                         |
| 3        | Book 1, page 80  | I. P. J. and and J. (Contra)  |
|          | Q.3 Read: Which numbers make the statements correct? (4)   | Individual work (6 min) Checking (2 min)                                    |
|          | (1 mark for each part a, b, c, d)  | Ps may use number lines  4 marks  |
|          | 28 min   |   |
| 4        | Book 1, page 80 Q.4 Read: Compare the answers. Write the correct signs between them. (4)                         | Individual work (5 min) Checking (2 min) Ps may use number lines  4 marks   |
|          | 35 min   |   |
| 5        | Book 1, page 80 Q.5 Read: Find the rule for each sequence. Write in the missing numbers and signs. a) (9) b) (9) | Individual work (8 min) Checking (2 min) Ps may use fingers, etc.  18 marks |
|          | 45 min   |   |

**TOTAL: 50 marks** 

| Bk1      | R: Mental counting C: Extending the number line (0 to 20) E: Counting in Context   | Lesson Plan<br>81   |
|----------|--|---|
| Activity |  | Notes   |
| 1        | Number line  a) Let's count from zero to 20 on the number line.  BB: (or on wall)    0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  | Whole class activity In chorus (with T pointing to numbers on number line)                              |
|          | b) Let's count backwards from 20 in a relay. P <sub>1</sub> '20', P <sub>2</sub> '19', P <sub>3</sub> : '18', etc.)  5 min   | T notes those having difficulties   |
| 2        | Posters 11 and 12 Let's look carefully at these posters.  a) How many children are skiing? (10) Where is the child wearing number 10 (1, 4, 3)? (e.g. 3rd from   | Whole class activity Discussion about the activities Involve several Ps                                 |
|          | right, etc.) In which position is: e.g. the child wearing the green scarf? (4th from left), etc. b) How many children are in the group which is skating? (10) How many children have fallen down? (3)              |   |
|          | How many children are on the ice altogether? (13)  c) How many children are standing around the snowman? (15) (Inner ring + outer ring)  | BB: $10 + 3 = 13$<br>BB: $10 + 5 = 15$  |
|          | d) Let's count the children who have sledges. (10 sledging, 2 fallen off and 4 just arrived)   | BB: $10 + (2 + 4) = 16$<br>10 + 6 = 16  |
| 3        | Interlude Song or rhyme 22 min   | Whole class in unison   |
| 4        | Book 1, page 81  Q.1 Read: Mark these numbers with dots on the number line. 13, 16, 19  Write these numbers in the correct places: 3, 7, 9, 12, 14, 18 Review at BB with whole class. Ps correct mistakes.  30 min | Individual work, monitored Discussion, checking (Drawn on BB or use enlarged copy master or OHP)        |
| 5        | Book 1, page 81  Q.2 Read: Mark the places of even numbers with red dots and odd numbers with green dots.  Make sure Ps know the meaning of 'odd' and 'even'.  | Individual work, monitored, helped  |
|          | How many even (odd) numbers did you mark? Show me with number cards now! (11, 10)  Let's read out the odd (even) numbers to 20.  | Make sure Ps hold cards up in<br>correct order. (Ps should lay<br>out cards on desk first)<br>In chorus |

| Bk1      |   | Lesson Plan 81  |
|----------|---|---|
| Activity |   | Notes   |
| 6        | <ul><li>Book 1, page 81, Q.3</li><li>A, come and point to the first piggy-bank. How much money does it</li></ul>  | Whole class activity Drawn on BB or use enlarged                              |
|          | contain? (One 10p + five 1p) Is <b>A</b> correct? <b>B</b> , which addition is equal to the money in the first piggy-bank? (10 + 5) Join them up. <b>C</b> , which shaded strip shows '10 + 5'? Why? (10 dark grey strips and | copy master or OHP  Discussion, agreement Checking                            |
|          | 5 light grey strips) Join them up. <b>D</b> , which number is equal to the amount of money in this piggy bank, (T points) this addition and this shaded strip? (15) Join it up.   | Ps copy in their books too.   |
|          | Deal with 2nd and 3rd piggy-banks in same way.  Now see if you can do the last three yourselves!  Review with whole class.  | Individual work, monitored, helped Discussion, checking                       |
|          | How many small strips make up a large strip? (20) What additions between 10 and 20 are <b>not</b> shown in your book? T writes responses on BB in order. Ps write down in their books too.                                    | BB: $10 + 2 = 12$<br>10 + 3 = 13<br>10 + 6 = 14<br>10 + 7 = 17<br>10 + 9 = 19 |
|          | Let's recite all these additions in order. $'10 + 0 = 10, 10 + 1 = 11,, 10 + 10 = 20'$ Let's do it again but faster!  | In chorus   |
|          | 45 min  |   |

| Bk1      | R: Mental counting  C: Extension numbers to 20  E: 10 + n  | Lesson Plan<br>82   |
|----------|--|---|
| Activity |  | Notes   |
| 1        | Number strips  Everyone lay down the '10' strip on your desk.  Now lay down one '1' (unit) strip beside it. How many does it show now? Who can come and write an addition about it?  Continue in same way for 2, 3, 4, , 10 '1' (unit) strips.   | Whole class activity (or use Cuisennaire rods or plastic cubes stuck together)  BB: 10 + 1 = 11 10 + 2 = 12 10 + 10 = 20  |
|          | Let's all read the additions together.  10 min   | Whole class in unison   |
| 2        | Money  |   |
| 2        | a) Look at this purse. It is empty. I have some 10p and 1p coins here.  A, come and put one '10p' and one '1p' into the purse.  How much money is in the purse altogether? (11p)  What unit are we using? (pennies) We can write it as:  BB: 1 ten + 1 unit = 11 (eleven)  (T points to coins as she writes.)  Repeat for: 1 ten + 5 units = 15 (fifteen)  1 ten + 8 units = 18 (eighteen)  b) Put on your desk: 13p, (15p, 17p, 20p)  Review at BB after each.  Show that 20p can be made up from one '10p' + ten '1p' (units), | Whole class activity Use real purse and money or enlarged copy master cut out coloured and stuck on BB. Ps have play coins on desks. Discussion, agreement. checking Individual work, monitored, helped BB: 13 = 1 ten + 3 units 15 = 1 ten + 5 units |
| 3        | two '10p' + no '1p' (units).  20 min  Interlude  | 17 = 1  ten + 7  units $20 = 2  tens + 0  units$  |
|          | Exercises or action song 22 min  | Whole class in unison   |
| 4        | <ul> <li>Read: Join up the equal values.</li> <li>T explains task first, making sure Ps know that the amounts in the columns are not in order.</li> <li>Review at BB with whole class. Mistakes discussed/corrected.</li> <li>Who can come and show these numbers on the number line?</li> </ul>   | Individual work T monitoring, helping, praising Discussion, checking, agreement Drawn on BB or use enlarged copy master or OHP Involve several Ps   |
| 5        | Book 1, page 82  Review connection between known 1-digit and 2-digit numbers. (i.e. 0 means no units, 10 means 1 'ten' plus no units; 2 means 2 units, 12 means 1 ten plus two units),  P <sub>1</sub> says a 1-digit number (e.g. 5 = 5 units), P <sub>2</sub> says 15 (1 ten plus 5 units), etc.  Q.2 Read: Complete the table.  T explains task. Review at BB with whole class. Discuss errors.  40 min   | Whole class activity Discussion At speed round class Individual work, monitored Drawn on BB or use enlarged copy master or OHP  |
| 6        | Book 1, Page 82, Q.3  Everyone put your finger on zero. Where would you get to if you moved 5 (3, 7, 9) to the right starting at  a) zero b) 10? Show me with your fingers now!  45 min  | Whole class activity At speed, T monitoring (or done as individual work)  |

| Bk1      | <ul> <li>R: Number line</li> <li>C: Extending numbers to 20. Operations without crossing 10.</li> <li>E: Logic puzzle</li> </ul>  | Lesson Plan<br>83  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | <ul> <li>Practice on the Number Line (0–20)</li> <li>T asks Ps to come out and show:</li> <li>various numbers (n) e.g. 15</li> <li>numbers so many less than (more than) n. e.g. 3 less than (more than) 15 is 12 (18)</li> <li>starting at n, so many steps to the right (left), etc. e.g. 2 steps to the right (left) of 15 is 17 (13)</li> </ul> | Whole class activity Agreement, checking Involve several Ps Ps who are correct may give the next task              |
| 2        | Shopping  Ps come to front in pairs. A is the shopkeeper, B is the customer.  Role play: e.g. A: How can I help you?  | Whole class (paired) activity T helping, encouraging   |
|          | B: I would like to buy this pencil. How much does it cost?  A: It costs 13p.  | Praising   |
|          | <ul> <li>B: Opens purse and takes out 13p (1 ten + 3 '1's)</li> <li>A: Puts pencil in bag and says 'Here you are.'</li> <li>B: Thank you. Goodbye!</li> </ul>   | Use real purse and real or play money.   |
|          | Who can come and write an addition about the story?  Repeat for other pairs of Ps and different amounts (to 20p).  15 min   | BB: 1 ten + 3 units = 13<br>Encourage creativity   |
| 3        | Book 1, page 83  Q.1 Read: Complete the drawings. Write additions about the pictures  T explains task. Review on BB with whole class. Demonstrate with Ps and coins at front of class if necessary.   | Individual work, monitored, helped Discussion (drawn on BB or use enlarged copy master or OHP) Agreement, checking |
| 4        | Interlude Relaxation 22 min   | Whole class resting  |
| 5        | Book 1, page 83  Q.2 Read: Complete the drawings. Write subtractions about the pictures  T explains task. Review on BB with whole class.  Demonstrate with Ps and coins at front of class if necessary.  27 min   | Individual work, monitored, helped Discussion (drawn on BB or use enlarged copy master or OHP) Agreement, checking |
| 5        | Book 1, page 83  Q.3 Read: Complete the additions and subtractions  Deal with one part at a time. Set a time limit per part (e.g. 2 minutes). Review orally round the class.  35 min  | Individual work, monitored Ps may use number lines to help them Mistakes discussed at number line. Self-correction |
| 6        | Book 1, page 83  Q.4 Read: Join up the numbers in increasing order.  Review meaning of 'increasing'. What number should we start at? (smallest, i.e. 1) Hands up if you have drawn an elephant (cat, hippopotamus, squirrel, etc.)  40 min  | Individual work Monitored Praising   |

| Bk1       |  | Lesson Plan 83                  |
|-----------|--|---------------------------------|
| Activity  |  | Notes                           |
| 7         | Logic Puzzle   |                                 |
| Extension | Listen carefully to what I say and think very hard about how you would find the answer.  |                                 |
|           | I have 9 gold coins. 8 of them are real gold but one is fake and lighter than the others. How can I find out which it is using this set of scales?   | Repeat one or two times         |
|           | Discuss strategies for solution. Demonstrate with scales and weights (or chocolate coins) covered in gold foil. (Or use plastic bags tied to each end of a coat-hanger.)   | Ask several Ps Discussion,      |
|           | <b>Logical solution</b> using the least number of weighings (2): Divide up the coins into 3 groups of 3.   | BB: $3 + 3 + 3 = 9$             |
|           | <ul><li>(1) Weigh first group against 2nd group;</li><li>a) if scales are even, then the fake coin is in the group not weighed or b) if one side is lighter than the other, it must contain the fake coin.</li></ul>   |                                 |
|           | <ul><li>(2) a) Weigh two coins from the third group:</li><li>i) if scales are even, then the fake coin is the one not weighed.</li><li>ii) if one side is lighter than the other, it contains the fake coin.</li></ul> |                                 |
|           | or b) Weigh two coins from the lighter group.  i) if scales are even, then the fake coin is the one not weighed.  ii) if one side is lower than the other, it contains the fake coin.                                  | Discussion, agreement, checking |
|           | 45 min   |                                 |

| Bk1      | R: C: Extending numbers to 20. Operations without crossing 10 E: Crossing over 10 on number line   | Lesson Plan<br>84  |
|----------|--|--|
| Activity |  | Notes  |
| 1        | Practice on the Number Line (0–20)  T asks Ps to come out and show:  numbers more than 14 and less than 20 even numbers greater than 11 next number smaller than 8 next odd number greater than 15, etc.   | Whole class activity Agreement, checking Involve several Ps Have a relay of Ps asking and showing (at speed)                                 |
| 2        | Problem  |  |
| _        | Listen carefully and show me the answer with number cards when I say. You may use 'objects' from your collection to help you.  7 boys and 3 girls were playing in the playground. Then 3 more  | Individual work, monitored T repeats several times. Discussion,  |
|          | children joined in. How many children were playing altogether?  Show me now! (13)  | •  |
|          | A, come and explain to us how you worked out the solution.  Who did the same as A? Who did it a different way? etc.  | BB: $7+3+3=13$   |
|          | Demonstrate with Ps at front of class. 15 min  | Checking, agreement  |
| 3        | <ul> <li>Read: At which numbers have we drawn the pictures?</li> <li>Talk about the different animals in the picture</li> <li>Review with whole class.</li> <li>B (C), come and draw a red dot at the number 8 (18).</li> <li>D (E) come and draw a green dot at the number 7 (17)</li> </ul>  | Individual work Monitored Discussion at BB (drawing or enlarged picture or OHP) Ps draw in their books too.                                  |
|          | 20 min   |  |
| 4        | Interlude Action song 22 min   | Whole class in unison  |
| 5        | Book 1, page 84  | Whole class activity   |
|          | Q.2 Read: Write down additions and subtractions for each picture.  Do first one on BB with whole class (using a different P to fill in each line), explaining what each number refers to.  Let's all read the equations: 'ten plus five equals fifteen,'  Ps do next two pictures themselves.  Review at BB with whole class, correcting mistakes.  Let's read out the equations: 'ten plus four equals fourteen,' | Drawn on BB or use enlarged copy master or OHP Ps copy in their books too In chorus Individual work, helped. Discussion, agreement In chorus |
|          | 30 min   |  |
| 6        | <ul> <li>Book 1, page 84, Q.3</li> <li>Read: What is the rule? Fill in the missing numbers and signs.</li> <li>a) X, come and fill in the first missing number, say the equation and write it on the BB. X: 'ten plus three equals thirteen'</li> </ul>  | Whole class activity Drawn on BB or use enlarged copy master or OHP BB:  |
|          | We have to go from 13 to 11. What have we done? (Taken away 2) <b>Y</b> , come and fill in the missing sign, say the equation and write it on the BB. <b>Y</b> : 'thirteen minus two equals eleven'  Continue until the line is completed. Discuss what the rule might be. ( <i>Rule</i> : Add 3, then take away 2.) Check it is correct.  | a) b) $10 + 3 = 13$ $20 - 8 = 12$ $13 - 2 = 11$ $12 + 7 = 19$ $11 + 3 = 14$ $19 - 8 = 11$ $14 - 2 = 12$ $11 + 7 = 18$                        |
|          | b) As above. ( <i>Rule</i> : Take away 8, then add 7.) Check it is correct.  38 min  | (Ps write in their books too)  |

| Bk1      |      |            |  | Lesson Plan 84                   |
|----------|------|------------|--|----------------------------------|
| Activity |      |            |  | Notes                            |
| 7        | Book | 1, page 84 | 4  |                                  |
|          | Q.4  | Read:      | Write equations about the moves. Where does chick get to if he starts at:                                  | Individual work                  |
|          |      | Revise:    | moving to the right on the number line is 'adding' moving to the left on the number line is 'taking away'  |                                  |
|          |      |            | out one part at a time, pupils put finger on starting and follow instructions. Ps write down the equation. | Class kept together on exercises |
|          |      |            | all parts with whole class, Ps reading out their equations. corrected on class number line.                | Discussion, agreement, checking  |
|          |      |            | 45 min   |                                  |

| Bk1      | <ul> <li>R: Operations without crossing ten</li> <li>C: Number bonds and sums to 11, crossing over 10</li> <li>E: Roman numbers</li> </ul>  | Lesson Plan<br>85  |
|----------|---|--|
| Activity |   | Notes  |
| 1        | Making 11  Look at the posters and find things which together make 11.  Poster 3: e.g. 3 trees + 3 bushes + 5 hedgehogs 2 squirrels + 4 rabbits + 3 frogs +1 tortoise + 1 pond                                  | Whole class activity<br>Involve several Ps<br>BB: $3+3+5=11$<br>2+4+3+1+1=11         |
|          | Poster 6 e.g. 11 swifts 5 ducks + 3 butterflies + 2 mushrooms + 1 snail   | 11 + 0 = 11<br>5 + 3 + 2 + 1 = 11<br>Discussion, agreement,                          |
|          | Look around the classroom and find things which make 11.  5 min   | checking   |
| 2        | Soft ball play T throws ball to P saying an addition or subtraction. P throws ball back to T saying answer.(e.g. $2+7$ , $12+7$ , $2+17$ , $17+2$ , $5-3$ , $15-3$ , $15-13$ ,)                                 | Whole class activity Involve several Ps At speed                                     |
| 3        | Pictures of 11 Look at the different pictures of 11. (T talks about each one.)  |  |
|          | BB: 11 (10) (1)   | Involve several Ps  Talk about birthdays, ages, house numbers, anything involving 11 |
|          | How many digits does it have? (2 digits: 1 ten and 1 unit)  • Knock on your desk 11 times.  | Whole class discussion about 11 as a 2-digit number                                  |
|          | <ul> <li>Clap your hands 11 times.</li> <li>Click your fingers 11 times.</li> <li>Blink 11 times</li> <li>Show me 11 using your number cardsnow!</li> </ul>   | In unison T checking who is having problems  |
|          | <ul> <li>The person who is 11th in this row stand up.</li> <li>A, come and point to 11 on the number line. Is he/she correct?</li> <li>B, come and drop 11 marbles into this bag. Is he/she correct?</li> </ul> | Praising only Checking, agreement  |
| 4        | Book 1, page 85  T writes a large 11 on BB, saying how to write it.   | Whole class in unison  |
|          | Write a big 11 in the air, on your desk, on you neighbour's back.  C, come and write a big 11 on the BB. Is he/she correct?  Who can do it better?  | Whole class in unison  T checking, praising  |
|          | Q.1 Read: <i>Continue the pattern</i> .  Who can read the equation? How many times did you write it? (3)  | Individual work, monitored BB: $11 - 1 = 10$   |
| 5        | Interlude Relaxation  20 min  22 min  | Whole class resting  |

| Bk1      |  | Lesson Plan 85   |
|----------|--|--|
| Activity |  | Notes  |
| 6        | <ul> <li>Read: Complete the pictures to make 11.</li> <li>T explains task. Drawings can be very rough – dots or crosses. Review with whole class.</li> <li>X, how many balloons did you draw? (3)</li> <li>Come and write an equation about it. Is he/she correct? Who can write another equation about it?</li> <li>Similar for other 3 pictures.</li> </ul>  | Individual work, monitored Discussion, checking BB: Balloons: $8 + 3 = 11$ $11 - 3 = 8$ Balls: $5 + 6 = 11$ $11 - 6 = 5$ etc.                                  |
| 7        | Book 1, page 85  Q.3 Read: Complete the table. $a + b = 11$ , $b = 11 - a$ Review orally round class, checking by substituting for $a$ and $b$ .  33 min   | Individual work, monitored  Discussion, checking  Agreement  |
| 8        | Read: What do the pictures tell you? Write equations about them.  Look at the first picture. How many of each kind of flower are there? How many flowers are in each row? How many rows? etc.  Y, come and write an addition about it. Is he/she correct?  Who thinks something else? etc.  Z, come and write a subtraction about it. Is he/she correct?  Who thinks something else? etc.  Repeat for other two pictures. Encourage creativity.  (Or done as individual work, reviewed with whole class)  40 min | Whole class activity  Drawn on BB or use enlarged copy master or OHP  Discussion, checking e.g. BB:  Flowers: 5+5+1=11  Fruit:: 4+2+5=11  Candles: 11-4=7 etc. |
| 9        | <ul> <li>Read: Write in the answers as Roman numerals.</li> <li>Remind Ps how the numbers 5 (V) and ten (X) are written, and that VI means '5 + 1 = 6' and IX means '10 - 1 = 9', etc.</li> <li>Review at BB with whole class. Ps write solutions then class reads out equations (with T's help).</li> </ul>   | Individual work, monitored Discussion Agreement, checking Self-correction In unison  |

| Bk1      | <ul> <li>R: Mental operations</li> <li>C: Addition facts and operations to 11</li> <li>E: Using a and b for unknown values</li> </ul>  | Lesson Plan<br>86   |
|----------|--|---|
| Activity |  | Notes   |
| 1        | Mental practice  T says an addition/subtraction (e.g. $10 + 4$ , $17 - 12$ , $8 + 3$ , $11 - 4$ , etc.) and Ps give answer.  5 min   | Whole class activity At speed Involve majority of Ps  |
| 2        | Dominoes  We are going to draw (or stick) dots on the dominoes to make 11 altogether. A, come and draw dots on one side of the domino.  B, come and complete the other side to make 11.  What addition have you made? (e.g. 4 + 7)  (Continue until all ways shown.)   | Whole class activity Have blank dominoes stuck to BB (enlarged copy master)  Discussion, agreement  |
|          | How should we put the dominoes in order?  e.g. BB:  2+9  3+8  4+7  5+6   | Class reads equations in unison 'two plus nine equals eleven' etc.  |
| 3        | Book 1, page 86  Q.1 Read: Join up the equations with the correct picture.  Fill in the missing numbers.  T explains task. Review at BB with whole class. Errors discussed.  18 min  | Individual work, monitored<br>Discussion, agreement,<br>checking, self-correcting<br>Enlarged copy master or OHP  |
| 4        | Interlude Action song  20 min  | Whole class in unison   |
| 5        | Making 11  Show me on your desks different ways to make 11 using only two number strips.  X, come and show me one way. Is he/she correct? Who has another way? (T displays in systematic order on BB and writes down each addition)  Are there any addition facts missing? (Yes: 0 + 11 = 11, 11 + 0 = 11)  Y, come and show us where we should write them.  Let's all read them together: 'eleven plus zero equals eleven', | Individual work (or in pairs), monitored  (or use Cuisenaire rods or plastic cubes stuck together)  BB: $(11+0=11)$ $10+1=11$ $9+2=11$ $8+3=11$ $1+10=11$ $(0+11=11)$ |
| 6        | Book 1, page 86  Q.2 Read: How many books are on each shelf? Write it down as an addition.  Deal with one part at a time. Review at BB with whole class.   | Individual work, monitored Discussion, agreement Enlarged copy master or OHP  |
| 7        | Book 1, page 86  Q.3 Read: Colour in the houses as shown Revise meaning of 'odd', 'even', '1-digit', '2-digit'. As a final check, write each answer in the roof of the house.  Z, what colour did you make the roof of the 3rd house from left? Who agrees? Who used another colour? Why? etc.  38 min   | Individual work Monitored, helped Discussion, checking Agreement, correcting  |

| Bk1       |   | Lesson Plan 86  |
|-----------|---|---|
| Activity  |   | Notes   |
| 8         | Book 1, page 86, Q.4  |   |
| Extension | Vera keeps her money in a purse and a piggy-bank. One day she put 3p more into her piggy-bank than into her purse. How much could she have put in each?   | Whole class activity Drawn on BB or use enlarged copy master or OHP   |
|           | Look at the table. Let's say that she put $a$ pennies in her purse and $b$ pennies in her piggy-bank. Who can think up an equation about $a$ and $b$ ?  | BB: $a + 3 = b$   |
|           | If Vera had put 5 pennies into her purse, how many pennies would she have put into her piggy-bank? (8) Who can come and point to this in the table?   | 5 + 3 = 8   |
|           | Look at the next column in the table. If Vera had put 10 pennies in her piggy-bank, how many would she have put in her purse? <b>B</b> , come and fill in the missing number. Is <b>B</b> correct? Let's check. |   |
|           | Continue until all columns are completed. (Ps fill in table in their books too.)  | etc. $a = b - 3$  |
|           | Who can complete the equation for $a$ ? Who agrees? $\mathbb{C}$ , choose a column from the table to check whether the equation is correct.   | a = b - 3 Check: $5 = 8 - 3 = 5$ $b = a + 3$ Check: $10 = 7 + 3 = 10$ |
|           | Who can complete the equation for $b$ ? Who agrees? $\mathbf{D}$ , choose another column from the table to check whether the equation is correct.   |   |
|           | T reads: How much did she put into her piggy bank if she had 11p altogether?  | Individual work Praising only   |
|           | Write your answer in the box. <b>E</b> , what did you put? (7) Who agrees? Who had something else?  | (Demonstration if necessary) BB: $a + b = 11$                         |
|           | Let's check. F, which column in the table shows this?   | <i>Check:</i> 4 + 7 = 11 ✓  |
|           | 45 min  |   |

| Bk1      | R: Mental operations  C: Operations, equations with 11  E: Length, cm  | Lesson Plan<br>87  |
|----------|--|--|
| Activity |  | Notes  |
| 1        | Oral work  Let's see how many different ways we can think of to describe the number 11.  (e.g. 10 + 1, 5 + 5 + 1, 14 - 3, the next number greater than 10, the next number smaller than 12, the first 2-digit odd number, etc.)  5 min | Whole class activity Class checks each response T writes all numerical cases on BB Praise creativity |
| 2        | Making 11 Look at the picture on the BB. Who can come and write a 3-part addition about one of the strips?   | Whole class activity   |
|          | BB: $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | T writes down what Ps say<br>Ps make on desks with<br>number strips or Cuisenaire                    |
|          | How can we change it into a 2-part addition? P: change (8 + 1) for 9, etc. Let's all read the additions together   | Ps change strips or rods<br>In unison  |
| 3        | Book 1, page 87  Q.1 Read: Fill in the missing numbers.  a) What have the circles to do with the numbers?  (11 circles altogether; 10 in top row, 1 in bottom row; 5 white circles and 6 grey circles)                                 | Individual work Monitored, helped Discussion   |
|          | Use these circles to help you fill in the missing numbers.<br>Review with whole class. Use counters if there are difficulties.<br>Show that: a) $5+6=5+(5+1)=10+1=11$<br>6+5=6+(4+1)=10+1=11   | Checking, agreement  |
|          | 11-5 = (11-1)-4 = 10-4 = 6 $11-6 = (11-1)-5 = 10-5 = 5$ Repeat for part b): $3+8 = 3+(7+1) = 10+1 = 11$ $8+3 = 8+(2+1) = 10+1 = 11$ $11-3 = (11-1)-2 = 10-2 = 8$ $11-8 = (11-1)-7 = 10-7 = 3$ $22 min$                                 | Demonstrate with Ps at front of class, grouping them in different ways (e.g. 5 girls and 6 boys)     |
| 4        | Interlude Song, rhyme, exercises  24 min   | Whole class in unison  |
| 5        | Book 1, page 87  Q.2 Read: The distance between each mark on the ruler is 1 cm. Write in the lengths.  Talk about centimetre (cm) first as a 'unit' of measurement.  | Individual work Discussion   |
|          | A, how long is the top line? (12 cm) Who thinks a different length?  B, how long is the middle line? (9 cm) Any other answers?  C, how long is the bottom line? (11 cm) Any other answers?   | Checking, agreement (Ps can use rulers too.)   |
|          | Which line is longest (shortest)? Make an inequality about the lines.  | BB: 9 < 11 < 12  |

| Bk1      |   | Lesson Plan 87   |
|----------|---|--|
| Activity |   | Notes  |
| 6        | Book 1, page 87  Q.3 Read: Fill in the missing number.  Review orally round class, with mistakes corrected at number line.  Show that $2 + 9 = 2 + (8 + 1)$ . etc.  | Individual work  Monitored, helped  Discussion, checking                                     |
| 7        | <ul> <li>Book 1, page 87</li> <li>Q.4 a) Read: Join up the even numbers in increasing order. Revise meaning of 'even' and 'increasing', What did you draw? (rabbit)</li> <li>b) Read: Write out the odd numbers in decreasing order. Revise meaning of 'odd' and 'decreasing', Which odd number should we start (finish) at? [19 (1)] Let's all read them together. '19, 17, 15,, 5, 3, 1'</li> <li>45 min</li> </ul> | Individual work Monitored, helped Discussion, checking  Discussion Individual work In unison |

| Bk1      | <ul> <li>R: Mental addition</li> <li>C: Operations, equations to 11</li> <li>E: Problems in context</li> </ul>  | Lesson Plan<br>88   |
|----------|---|---|
| Activity |   | Notes   |
| 1        | Mental Practice  a) T says a number (e.g. 8) and P says number which must be added to make 11 (e.g. 3)  3 min   | Whole class activity At speed round class Ps may use fingers if stuck |
| 2        | Addition to 11 Tell me a 2-member addition for 11. (e.g. $2+9$ , $7+4$ , $6+5$ ,)   | Whole class activity Checking, reasoning                              |
|          | 8 min   | cheeking, reasoning   |
| 3        | Book 1, page 88  Q.1 Read: Find the missing numbers.  Mark them on the number line.   | Individual work but keeping together                                  |
|          | Look at the inequality in the top row. Which number is in the middle of the inequality? (11)  | Monitored, helped   |
|          | Everyone put your finger on 11. Use your other hand to count 3 more than 11, then 3 less than 11 and write the numbers in the boxes. Now mark them on the number line.                              | Discussion, checking  |
|          | Continue with the equations in this way too.  Review at BB with whole class. Let's read out the statements.  14 min   | Enlarged copy master or OH In unison                                  |
| 4        |   |   |
| 4        | Book 1, page 88, Q.2  Everyone look at part a). A, come to the number line and put your   | Whole class activity  |
|          | finger on the '3'. <b>B</b> , come to the BB and be ready to write in the missing numbers or signs.   | Drawn on BB or use enlarged copy master or OHP                        |
|          | If we add a number, in which direction must <b>A</b> move? (to the right) If we subtract a number, which way must <b>A</b> move? (to the left)  | In unison   |
|          | Rest of class give instructions to A:' add 5', A moves finger 5 places to right and tells <b>B</b> to write in '8'. Repeat to '11'.   |   |
|          | <b>C</b> , come and put your finger on '11'. Move back to 8. What has <b>C</b> done? Class shouts 'taken away 3'. <b>D</b> , come to BB and fill in the box.  | Ps can follow on own number lines too                                 |
|          | Continue in similar fashion until all parts are complete.  Let's all read the additions and subtractions, following with your fingers on your own number line: 'Three plus five equals eight, eight | In chorus   |
|          | plus three equals eleven; 11 minus three equals eight,!  (Or done as individual work, reviewed at BB with whole class.)   |   |
| 5        | 20 min<br>Interlude   |   |
|          | Song, rhyme, exercises  22 min  | Whole class in unison   |
| 6        | Book 1, page 88   | Individual work   |
|          | Q.3 Read: Fill in the missing numbers.  | Monitored, helped   |
|          | Use your number line to help you. Review orally round class.  27 min  | Checking, correcting  |

| Bk1      |   | Lesson Plan 88   |
|----------|---|--|
| Activity |   | Notes  |
| 7        | <b>Problem</b> Listen carefully and try to picture the story in your head. You can use  | Whole class activity (e.g. counters, number/                                   |
|          | what you like to help you. Show me the answer with a number card when I say.  | sign/shape cards, etc.)  |
|          | John was going to the lake for the day.   | Repeat a few times.  |
|          | He bought a train ticket for £6. When he got off the train he caught a bus.<br>How much did his bus ticket cost if he spent £11 altogether on travel? | Give Ps time to think  |
|          | Show me with a number card now! (5)   | Discussion, agreement  |
|          | <b>E</b> , come and explain to us how you worked out the answer. Is he/she correct? Who thinks something different? etc.                              | BB: 6+ = 11  |
|          | Discuss strategy for solution (BB) <i>Answer:</i> The bus ticket cost £5.   | 11 - 6 = 5   |
|          | 35 min  |  |
| 8        | Book 1, page 88   | Individual work  |
|          | Q.4 Read: Kate and Mary had 20p in total. Kate had 11p.<br>How much money did Mary have?  | Monitored, helped Discussion, agreement  BB: $11 + \square = 20$ $20 - 11 = 9$ |
|          | Talk about strategy for solution (as above).  |  |
|          | Review at BB with whole class. Answer: Mary had 9p.   |  |
|          | 40 min  |  |
| 9        | Book 1, page 88   | Individual work  |
|          | Q.5 Read: Fill in the missing numbers.  | Monitored  |
|          | Review orally round the class. Mistakes corrected at number line.   | Checking, correcting   |
|          | 45 min  |  |