<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **1 Mental operations** | Whole class activity
Look carefully around the classroom
a) Who can make up a 2-member addition to 10 about the classroom?
   e.g. P1 says, ‘3 windows +1 door’ and T writes on BB: 3 + 1 = 4
   P2 says, ‘2 boards + 4 tables’ and T writes on BB: 2 + 4 = 6
   Repeat for 3-member additions to 10.
b) Who can say what I am doing as a subtraction?
   e.g. T calls out 9 Ps to front of class and then asks 4 to sit down.
   T arranges draws 5 dots on BB and then rubs out 3 of them.
   Who can make up a subtraction of their own? Is he/she correct? |
| **2 Poster 8** | Make sure Ps lay out cards in correct order on desk first before holding them up
Look at this poster. How many zebra crossings can you see?
Show me with number cards... now! (10)
Let's check by counting while A 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) |
| **3 Book 1, page 65** | Individual work, monitored
Q.1 Read:
a) Write in the box below each picture the number of shapes it contains.
b) Colour blue the boxes which have even numbers.
   Colour red the boxes which have odd numbers.
c) Fill in the missing numbers.
   Each sum must equal 10
   Review with whole class, dealing with one part at a time.
How many pairs and how many remainders are in each picture?
P5s come to front to circle the pairs while Ps do same in their books. |
| **Extension** | Whole class in unison
Individual work, monitored
Discussion, checking
b) BB: odd even
   7, 3, 9 4, 10 |
| **4 Interlude** | Individual work, monitored
Song or rhyme |
| **5 Book 1, page 65** | Individual work, monitored
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. |
| **6 Roman Numerals** | Whole class activity
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 |

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<th>Lesson Plan 65</th>
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<tbody>
<tr>
<td>Bk1</td>
<td>Book 1, page 65</td>
</tr>
</tbody>
</table>

**Activity 7**

**Book 1, page 65**

Q.3 Read: *Fill in the missing numbers.*

- Deal with one part at a time. Review with whole class, checking on individual number lines or with counters/cubes.
- 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. $4 + 2 - 1 + 3 + 1 - 5 = ?$
- Show me the number you ended up at . . . . .now! (4)
- Repeat for other combinations. (Ps can give instructions to class too.)
- Elicit that when adding, you move to the right along the number line and when taking away you move to the left.

**Notes**

- Individual work
- Discussion
- Agreement, checking, correcting
- T speaks very slowly. Ps follow instructions, pointing to numbers on their number lines 0–9.
- Discussion, demonstration

---

45 min
**Bk1**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td></td>
</tr>
<tr>
<td>Logic set</td>
<td></td>
</tr>
<tr>
<td>a) Lay out on your desk all the black shapes from your logic set. How many are there? (10) Hold up the shape I am describing from the black set: 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.</td>
<td>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 T sticks shapes on BB too. Repeat with several Ps Discussion, agreement</td>
</tr>
<tr>
<td>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. How many are there? (8) A, stand up and describe one of your shapes to the class. Everyone show me A’s shape. A, are they correct?</td>
<td></td>
</tr>
<tr>
<td>15 min</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td></td>
</tr>
<tr>
<td>Book 1, page 66</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td>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.</td>
<td>Drawn on BB or use enlarged picture or OHP. Discussion, checking</td>
</tr>
<tr>
<td>You have 3 minutes to do this. Let’s see who can finish first! B, how many apples did you colour red? (5) Is he/she correct? etc. C and D, come and fill in the equations on the BB. Are they correct? Who thinks another number? Why? etc.</td>
<td>BB: 4 + 5 = 9 9 – 4 = 5</td>
</tr>
<tr>
<td>20 min</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td></td>
</tr>
<tr>
<td>Interlude</td>
<td>Whole class resting</td>
</tr>
<tr>
<td>Relaxation</td>
<td></td>
</tr>
<tr>
<td>22 min</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td></td>
</tr>
<tr>
<td>Book 1, page 66</td>
<td>Individual work</td>
</tr>
<tr>
<td>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.</td>
<td>Monitored Correcting against number line or using counters, etc.</td>
</tr>
<tr>
<td>32 min</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td></td>
</tr>
<tr>
<td>Book 1, page 66</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>Q.3 Look at the picture. W, come and point to the shapes going into the machine. Where are they in the table? X, come and point to the shape coming out of the machine. Where is it in the table? 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) Who can tell me what the machine is doing? (adding the two 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 correct? Who thinks another number? Let’s check. Continue until all the columns are completed.</td>
<td>Drawn on BB or use enlarged copy master or OHP. Discussion, agreement</td>
</tr>
<tr>
<td>40 min</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bk1</strong></td>
<td><strong>Lesson Plan 66</strong></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Individual work</td>
</tr>
</tbody>
</table>

**Book 1, page 66**

Q.4 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).

| 45 min | |

BB: 3 + 5 = 8
3 + 5 ≠ 9
**Bk1**

**R:** Mental operations  
**C:** Revision and practice (0–10)  
**E:** Problems in context

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **1** Problem  
Listen very carefully, picture the story in your head, and show me the answer with a number card when I say.  
In a drawing competition, 4 pupils used watercolours, 2 pupils used crayons and 3 pupils used coloured pencils.  
How many pupils have I mentioned altogether?  
Show me with a number card...now! (9)  
Who can explain to the class how they got their answer?  

5 min |

| **2** Book 1, page 67  
Q.1 Read: What has happened to the tub of 10 strawberries?  
Complete the equations.  
Look carefully at the picture. Who can tell a story about it?  
(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.)  
How many strawberries are left in the bowl? (3)  
Now complete the equations.  
Review answers, making sure Ps know what each number in each equation refers to in the picture (especially the '3's).  

15 min |

| **3** Book 1, page 67, Q.2  
Look at the picture. What shape is going into the machine? (square)  
What shape is coming out of the machine? (triangle)  
Look at the table. When the square equals 4, the triangle equals 1, etc.  
What do you think the machine has done to the numbers going in? (It has taken away 3.)  
A, come and fill in one of the missing numbers. Is he/she correct?  
Who thinks it should be another number? Why? etc.  
Continue until all columns are completed.  
Who can come and write down the rule for the triangle (square)?  
Who thinks something else? Let's check which is correct.  

25 min |

| **4** Interlude  
Song, rhyme  

27 min |

| **5** Book 1, page 67  
Q.3 Read: Join each sum to the correct point on the number line.  
Review with whole class, showing each on class number line.  
Which number has two statements joined to it? (3)  
Who can tell me another statement which would make '3'?  
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.  
Review orally round the class, checking on class number line.  

45 min |

**Lesson Plan 67**

**Notes**

Whole class activity  
T repeat slowly a few times  
Discussion, reasoning  
BB: $4 + 2 + 3 = \Box$  
$4 + 2 + 3 = 9$

Drawn on BB or use enlarged picture or OHP  
Ask several Ps  
Discussion with whole class about different contexts.  
Individual work  
BB: $10 - 3 - 4 = \underline{3}$  
$10 - 4 - 3 = \underline{3}$

Whole class activity  
Drawn on BB or use enlarged picture or OHP  
Discussion, agreement  
Checking  
Discussion, agreement, checking  
Ps write in their books too.  
BB: $\triangle = \Box - 3$  
$\Box = \triangle + 3$

Whole class in unison  
Individual work  
Discussion, checking  
Ask several Ps  
Individual work, helped  
Or demonstrate with Ps at front of class
### Lesson Plan 68

**Bk1**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Mental Practice</strong>&lt;br&gt;T asks P an addition or subtraction. If P answers correctly, then he/she asks the next addition/subtraction.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Logic set</strong>&lt;br&gt;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.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Book 1, page 68</strong>&lt;br&gt;Q.1 Revise meaning of 'odd' and 'even'.&lt;br&gt;a) T reads out question and Ps draw dots on number line.&lt;br&gt;Review orally. How can we write this using numbers/signs? Similarly for parts b) and c).</td>
</tr>
<tr>
<td>4</td>
<td><strong>Interlude</strong>&lt;br&gt;Relaxation</td>
</tr>
<tr>
<td>5</td>
<td><strong>Book 1, page 68</strong>&lt;br&gt;Q.2 Read: Fill in the missing numbers.&lt;br&gt;Deal with one column at a time. Review orally round the class, correcting mistakes against the number line and writing on BB.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Book 1, page 68, Q.3</strong>&lt;br&gt;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')&lt;br&gt;Who can come and fill in the missing number on another arrow?&lt;br&gt;Read out the equation on your arrow. Is he/she correct? etc.&lt;br&gt;Repeat until all arrows are completed.</td>
</tr>
</tbody>
</table>
| 7 | **Book 1, page 68, Q.4**<br>Read: Complete the table. Write the rule in different ways.<br>Look at the table. What are these shapes? (T points) (heart, flower)<br>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.<br>Review numbers in table at BB with whole class.<br>Who can come and write the rule for the flower?<br>Is he/she correct? etc. Let's all check it on the table.<br>'six equals two plus four', 'nine equals five plus four', etc.<br>Similarly for the heart. 'two equals six minus four', etc.<br>What number do we get if we take away the 'hearts' from the 'flowers'? (4)<br>So the rule can be written down in 3 different ways. (BB)<br>Let's all read them. 'a flower equals a heart plus four' etc. | **Whole class in unison**<br>Drawn on BB or use enlarged copy master or OHP<br>Individual work, monitored<br>Discussion, agreement<br>BB: ♡ = ❤ + 4<br>Whole class in unison<br>❤ – ♡ = 4
<table>
<thead>
<tr>
<th><strong>Activity</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Book 1, page 69</strong></td>
<td><strong>Revision Test (0 to 10)</strong></td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>This lesson will be a test to see what you have learned.</td>
</tr>
<tr>
<td><strong>Q.1 Read:</strong> Fill in the missing numbers.</td>
<td>Ps may use number lines</td>
</tr>
<tr>
<td>a) 4, 1, 5, 6 (4)</td>
<td>Individual work (6 min)</td>
</tr>
<tr>
<td>b) 6, 3, 1, 5 (4)</td>
<td>Checking (2 min)</td>
</tr>
<tr>
<td>c) 8, 5, 1, 6 (4)</td>
<td><strong>12 marks</strong></td>
</tr>
<tr>
<td><strong>9 min</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Individual work (6 min)</td>
</tr>
<tr>
<td><strong>Q.2 Read:</strong> Fill in the missing numbers.</td>
<td>Checking (2 min)</td>
</tr>
<tr>
<td>a) 3, 6, 5, 2 (4)</td>
<td><strong>8 marks</strong></td>
</tr>
<tr>
<td>b) 2, 9, 3, 7 (4)</td>
<td></td>
</tr>
<tr>
<td><strong>17 min</strong></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Individual work (4 min)</td>
</tr>
<tr>
<td><strong>Q.3 Read:</strong> Fill in the missing numbers.</td>
<td>Checking (1 min)</td>
</tr>
<tr>
<td>a) 3 (1)</td>
<td><strong>4 marks</strong></td>
</tr>
<tr>
<td>b) 5 (1)</td>
<td></td>
</tr>
<tr>
<td>c) 8 (1)</td>
<td></td>
</tr>
<tr>
<td>d) 6 (1)</td>
<td></td>
</tr>
<tr>
<td><strong>22 min</strong></td>
<td>Whole class resting</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>Interlude</strong></td>
</tr>
<tr>
<td>Relaxation</td>
<td><strong>24 min</strong></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Individual work (4 min)</td>
</tr>
<tr>
<td><strong>Q.4 Read:</strong> Fill in the missing numbers.</td>
<td>Checking (2 min)</td>
</tr>
<tr>
<td>Top row: 2, 4, 10 (3)</td>
<td><strong>6 marks</strong></td>
</tr>
<tr>
<td>Bottom row: 1, 7, 9 (3)</td>
<td></td>
</tr>
<tr>
<td><strong>30 min</strong></td>
<td></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Individual work (10 min)</td>
</tr>
<tr>
<td><strong>Q.1 Read:</strong> Write down the answers. Mark them with dots on the number line.</td>
<td>Checking (5 min)</td>
</tr>
<tr>
<td>a) ○: 6 (1)</td>
<td><strong>10 marks</strong></td>
</tr>
<tr>
<td>correct position on number line (1)</td>
<td></td>
</tr>
<tr>
<td>b) △: 4, 5, 6, 7 (4)</td>
<td></td>
</tr>
<tr>
<td>correct positions on number line (4)</td>
<td></td>
</tr>
<tr>
<td><strong>45 min</strong></td>
<td>TOTAL: 40 marks</td>
</tr>
</tbody>
</table>
**Lesson Plan 70**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **Bk1** | **R:** Operations (0 to 10)  
**C:** Recognise and distinguish shapes: circle, triangle, square  
**E:** Logic problem |
| **1 Logic set**  
a) Lay out on your desk all the squares in your logic set.  
How many squares are there? (4)  
b) Separate them into 2 groups. A, how did you make your 2 groups? (e.g. small and large) Who did the same as A?  
Who did something different? (e.g. black or white)  
What can you say about all the squares? (e.g. 4 sides, straight lines, all sides are the same length)  
Individual work (or in pairs)  
Monitored  
BB: small + large  
2 + 2  
black + white  
2 + 2  
Ask several Ps |
| **2 Book 1, page 70**  
Q.1 Read: Make different sequences, starting with these 3 elements.  
What is the first (2nd, 3rd) shape? (square, triangle, circle)  
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, circle . . .'  
Whole class introduction  
Discussion  
Individual work, monitored  
T helping where necessary  
T draws each on BB  
Praising only |
| **3 Logic set sequence**  
Lay out on your desk a sequence of 10 shapes so that each shape differs from the one before in only one way.  
e.g.  
![sequence image]  
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.  
Individual work (or in pairs)  
Monitored  
T sticks shapes on BB as they are read out.  
Discussion  
Praising |
| **4 Interlude**  
Song or rhyme  
Whole class in unison |
| **5 Book 1, page 70**  
Q.2 T revises names of each shape, then explains the task.  
Deal with one part at a time.  
Review at BB with whole class.  
What do the numbers in part b) refer to? (BB: 1 red + 2 blue + 1 red + . . . = 10 shapes)  
What shape is 3rd from the right? (blue square)  
Where is there a red triangle? (e.g. 1st from left) etc.  
Individual work, monitored, helped  
Drawn on BB or use enlarged copy master or OHP  
Discussion, checking  
Praising |
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.
- **E.** come and fill in all the hexagons.

- 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. circle)
  - **G.** come and fill in the circle.

- 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 \( \star + 1 + 1 = 9 \) at the beginning and the rest follows on directly.

Final solution:

- **BB:** \( 3 + 3 + 3 = 9 \)
  - so \( \square = 3 \)

- **BB:** \( 7 + 1 + 1 = 9 \)
  - so \( \star = 7 \)

- **BB:** \( \bigcirc + \bigcirc + 1 = 9 \)
  - so \( \bigcirc = 4 \)

- **BB:** \( 3 + \triangle + 4 = 9 \)
  - so \( \triangle = 2 \)

- **BB:** \( 1 + \bigast + 2 = 9 \)
  - so \( \bigast = 6 \)

- **BB:** \( \bigast + 2 + 2 = 9 \)
  - so \( \bigast = 5 \)

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.

45 min

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**Lesson Plan 71**

**Activity**

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?

   ![](shapes.png)

   - a) 
   - b) 
   - c) 
   - d) 

   15 min

2. **Book 1, page 71**
   
   Q.1 Read: Write additions about the number of sides of the shapes.
   
   How many vertices (corners) does each shape have?
   
   (Same as the number of sides)

   20 min

3. **Interlude**
   
   Song, rhyme, exercises

   22 min

4. **Book 1, page 71**
   
   Q.2 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 important 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.

   Which numbers are missing? (e.g. 3) Is it possible to make a larger square with this number of unit squares? (No)

   30 min

5. **Book 1, page 71**
   
   Q.3 Read: Show, by colouring the unit triangles, different ways of making larger triangles.

   Colour a different triangle in each picture.

   Review with whole class. Ps come to BB to show one of their triangles. How many unit triangles have been coloured in each?

   40 min

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

**Notes**

Shapes drawn on BB or use enlarged copy master or OHP

Ps work in pairs first, then whole class activity

T monitoring, helping

Discussion at BB about shapes

Deal with parts a), b), c), d), one at a time.

Can be differentiated

Individual work, monitored

Discussion, checking

BB: 3 + 4 = 7
   3 + 3 + 4 = 10
   5 + 4 = 9
   3 + 6 = 9

Praising

Whole class in unison

Individual work

Monitored, helped

Discussion

BB: 1, 4, 9, 16, (25)

Checking, agreement

Individual work, monitored, helped

Grids drawn on BB or use enlarged copy master or OHP

BB:

Grid drawn on BB or use enlarged copy master or OHP

BB: 3 + 2 + 6 = 11
R  B  G

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### Lesson Plan 72

#### Activity 1: Making shapes

- **R:** Triangle, square, circle
- **C:** Recognise and distinguish shapes
- **E:** Spatial awareness

**Notes**
- Individual work (or pairs)
- Monitored, helped
- Copy masters (Shape A) photocopied onto coloured card and cut out.
- Copy master (Shapes B)

**Making shapes**

Have ready for each P (or pair of Ps)
- sheet of paper with larger shape outlined (circle, square, rectangle, triangle or hexagon)
- 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

Cover the large shape with the unit shapes and count how many units you used.

Each P tells class what shape they made and number/shape of units used.

<table>
<thead>
<tr>
<th>1 Making shapes</th>
<th>2 Building solids</th>
<th>3 Interlude</th>
<th>4 a) Book 1, page 72</th>
</tr>
</thead>
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<tr>
<td><strong>Notes</strong></td>
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<tr>
<td>Individual work</td>
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<tr>
<td>(or pairs)</td>
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<tr>
<td>Monitored, helped</td>
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<td>Copy masters</td>
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<td>(Shape A)</td>
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<td>onto coloured</td>
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<td>card and cut</td>
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<td>Copy master</td>
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<tr>
<td>(Shapes B)</td>
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</tbody>
</table>

**Notes**
- Monitored, helped
- Individual work, monitored
- Praise creativity

**Building solids**

Ps have unit cubes on desks. T builds a solid and talks about it.

**Notes**
- T demonstrating, explaining 'solid', column'.
- Individual work, monitored
- Praise creativity

<table>
<thead>
<tr>
<th>2 Building solids</th>
<th>3 Interlude</th>
<th>4 a) Book 1, page 72</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Notes</strong></td>
<td></td>
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<tr>
<td>T demonstrating,</td>
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<tr>
<td>explaining 'solid'</td>
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<td>, column'.</td>
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<tr>
<td>Individual work,</td>
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<tr>
<td>monitored</td>
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<tr>
<td>Praise creativity</td>
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</tbody>
</table>

**Notes**
- Individual work
- Monitored, helped
- Discussion at BB
- Solutions:

```plaintext
a) 2 + 2 + 2 = 8
b) 2 + 1 + 3 = 6
c) 2 + 2 + 1 = 5
```

**Notes**
- Individual work
- Monitored, helped
- Discussion at BB
- Solutions:

```plaintext
a) 2 + 1 + 3 + 2 = 8
b) 2 + 1 + 1 = 4
c) 1 + 2 + 1 + 2 = 6
```

**Notes**
- Individual work
- Monitored, helped
- Discussion at BB
- Solutions:

```plaintext
b) 2 + 1 + 3 = 6
```

**Notes**
- Individual work
- Monitored, helped
- Discussion at BB
- Solutions:

```plaintext
2 + 1 + 3 + 2 = 8
```
<table>
<thead>
<tr>
<th>Activity</th>
<th>Book 1, page 72</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td><strong>Q.2 Read:</strong> Join up the names to the correct shapes. Colour the rectangle red. Review at BB with whole class.</td>
<td>Individual work, monitored Drawn on BB or use enlarged copy master or OHP Discussion, checking</td>
</tr>
<tr>
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<td><strong>40 min</strong></td>
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<td>6</td>
<td><strong>Q. 3 T explains task.</strong> Colour the triangle red, the small squares blue, and the rectangle green. Draw something in your picture using another shape. Drawings reviewed with whole class.</td>
<td>Individual work T monitoring, praising Creativity encouraged Discussion</td>
</tr>
<tr>
<td></td>
<td><strong>45 min</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Bk1** | **Lesson Plan** 73
---|---
**Activity** | **Notes**

### 1

**a) Months**

| R: Counting: Cardinal and ordinal numbers | Whole class activity |
| C: Calendar: days, weeks, months | Discussion |
| E: Numbers beyond 10 | Encourage Ps to talk about dates special to them |

| 20 min |

- Who knows what this is? (T holds up real calendar with pictures)
- What does it show? (dates: months, days, weeks for a year)
- What is your favourite month? Why?
- T shows each month at a time and talks about the picture.
- Ps say the name of each month aloud.
- Hands up those born in January (February etc.) Let's recite all the names of the months in order: 'January, February, . . ., December'
- Let's do it again more quickly! How many months are there? (12)

**b) Days of the week**

| 22 min |

- 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)
- Let's all recite the days of the week in order: 'Monday, Tuesday, . . ., Sunday' How many days are there? (7)
- What do 7 days make? (1 week) T shows weeks on calendar.

### 2

**Interlude**

Song or rhyme about the months of the year

| 20 min |

Whole class in unison

### 3

**Book 1, page 73, Q.1**

What year is it now? Look at the calendar for 2018 in Book 1.

- T explains abbreviations for days of week by covering the ends of name cards. Why is the complete name not written? (no room)
- Everyone put your finger on January. What is the first (last) day in January? Which day is the 3rd (5th, 8th, 10th) of January?
- 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?
- Everyone point to your birthday on the calendar and see what day it will be. Whose is on a Monday, etc.?
- Ps read the questions in their books and write the answers.

### 4

**Interlude**

Song about days of the week

| 32 min |

Whole class in unison

### 5

**Exercises**

| 45 min |

- a) Read: *What date is it today? What day is it today?*
  - T writes on BB while Ps copy in their books.
- b) Read: *What date is your next birthday? How old will you be?*
  - T writes own birthday on BB and explains day, month, year.
  - Whose birthday is first in the year? Whose is the last?
  - 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.

Individual work

Monitored, helped

Discussion about youngest, oldest

Ask several Ps
<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Revising days, months</strong>&lt;br&gt;• Let's all recite the days of the week. Can you do it backwards?&lt;br&gt;• Now let's say the months of the year. 'January, . . ., December'&lt;br&gt;Show me the answer to these questions with number cards.&lt;br&gt;a) How many days are there in a week? Show me . . . now! (7)&lt;br&gt;b) How many months are there in one year? (12)</td>
</tr>
<tr>
<td>2</td>
<td><strong>Book 1, page 74</strong>&lt;br&gt;Look at the calendar (page 73) Everyone point to February.&lt;br&gt;Q.1 Read: a) <em>How many days are there in February 2018?</em>&lt;br&gt;Write it in the box.&lt;br&gt;b) <em>How many months start with the letter J, M, A, O?</em>&lt;br&gt;Write the number in the box beside each letter.&lt;br&gt;Review at BB with whole class.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Book 1, page 74</strong>&lt;br&gt;Q.2 T reads questions. Ps write down answers in boxes.&lt;br&gt;Review with whole class. Ps come out to show the months on enlarged calendar or OHP.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Book 1, page 74</strong>&lt;br&gt;Q.3 Revise the meaning of 'yesterday', 'today' and 'tomorrow'.&lt;br&gt;T reads questions. Ps write down answers in boxes.&lt;br&gt;Review with whole class, checking against calendar.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Interlude</strong>&lt;br&gt;Song or rhyme</td>
</tr>
<tr>
<td>6</td>
<td><strong>Months</strong>&lt;br&gt;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?</td>
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<tr>
<td>Bk1</td>
<td>Lesson Plan 74</td>
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<tr>
<td><strong>Activity</strong></td>
<td><strong>Notes</strong></td>
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<tr>
<td>7</td>
<td><strong>Book 1, page 74</strong></td>
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</tbody>
</table>
| Q. 4 Read: *Put the pictures in the correct order.*  
*Write their numbers in the boxes.*  
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.  
Talk about the seasons: spring, summer, autumn, winter and what happens in them. (Refer to weather, plants, animals, people.) | Individual work, monitored  
Drawn on BB or use enlarged copy master or OHP  
Discussion, checking  
Whole class activity  
BB: spring, summer, autumn, winter |

45 min
## Lesson Plan

### Activity

<table>
<thead>
<tr>
<th>Bk1</th>
<th>Notes</th>
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</table>
| **R:** Counting: Cardinal and ordinal numbers  
**C:** Calendar: days, week, months, seasons  
**E:** Numbers beyond 10 | **Lesson Plan**

<table>
<thead>
<tr>
<th>75</th>
<th><strong>Notes</strong></th>
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</table>
| **Revision Practice**  
- T says a day (e.g. Monday) P answers with next day (e.g. Tuesday)  
- T says a season (e.g. winter) P answers with next season (e.g. spring)  
- T says a month (e.g. July) P answers with next month (e.g. August) | Whole class activity  
At speed  
Involve all Ps |
| **Seasons**  
Look at these pictures. What season could it be? Why?  
- **Poster 2** (summer or late spring: flowers, butterfly, no coats, eating outside so must be quite warm, etc.)  
- **Poster 5** (possibly summer: trees have lots of leaves, bulrushes in flower, animals and birds with young which have grown quite big)  
- **Poster 7** (probably autumn or early spring: wearing coats, wellingtons, but ice-cream van still going its rounds)  
- **Poster 11** (winter: snow, water frozen over, everyone well wrapped up with gloves, scarves, hats, pink noses and cheeks) | 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. |
| **Book 1, page 75**  
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 |
| **Interlude**  
Physical exercises | Whole class in unison |
| **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. | Individual work, monitored  
It would be better if each P had photocopied sheet of calendar copy master  
Discussion, agreement  
Whole class activity, at speed |
| **Book 1, page 75**  
Q.3 Read out questions.  
- a) Ps count months on calendar first.  
- b) Deal with one part at a time. Review orally around class. Mistakes corrected against class calendar.  
- c) Repeat orally round class for other months too. | Individual work  
Discussion, agreement  
Whole class activity, at speed |
### Lesson Plan 75

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Book 1, page 75, Q.4</strong></td>
<td>Ps have calendar sheet each</td>
</tr>
</tbody>
</table>

Listen carefully to the question and find these dates on your calendar.

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)

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)

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.)

**45 min**

Discussion, demonstration on class calendar
Agreement
### Lesson Plan 76

**Activity 1**

**Number cards**

T says a month (e.g. June)  Ps show ordinal number (e.g. 6) with number cards.

5 min

**Activity 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)

What is the highest number we counted to? (31)

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.

- b) What is the lowest number we counted to? (28)
  - How many months have 28 days? (1)
  - 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.

Review at BB with whole class.

Hands up those of you who have a birthday in a month with (31) days.

Talk about February which has 28 days most of the time but has 29 days every 'leap' year. (4th year)

Who knows someone born on 29th February? (In case no one, T should mention somebody.) Will they miss birthdays and be younger?

28 min

**Activity 3**

**Interlude**

Action song/rhyme

30 min

**Activity 4**

**Writing dates**

Who can tell me what is special about 14th February? (St. Valentine's Day)

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 exactly what day we were meaning.

- 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 down to make sure it is not mixed up with another St. Valentine's Day? (year) T writes '2016'.

- We usually put a slash or a dot between the numbers to keep the day, month and year separate.

**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.

- b) Read: Which months are in the following dates?
  - Review with whole class. Ps can write down dates of birth too.

45 min
<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
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</table>
| 1 | **Posters 4 and 7**  
Talk about each poster separately. What time of day do you think it is? Why?  
*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.  
*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.  

10 min |
| 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)  
**Q.1** Read: *Write the numbers on the clock.*  
Review at BB with whole class.  
Let's recite the numbers, starting from '1'. (1, 2, 3, . . ., 12)  
What time is this clock showing? (one o'clock)  
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:  
3 o'clock (6 o'clock, 9 o'clock, 11 o'clock)?  

20 min |
| 3 | **Interlude**  
Song, rhyme, relaxation  

22 min |
| 4 | **Book 1, page 77**  
**Q.2** Read: What is the time on each clock?  
Review at BB with whole class.  
Discuss the clock showing '12 o'clock'. Why can we see only one hand?  
I am going to tell you whether the time for each clock is in the morning or evening. Write beneath each clock ‘am’ or ‘pm’  

30 min |
| 5 | **Book 1, page 77**  
**Q.3** Deal with one part at a time. Review with whole class  
Show additions on BB.  
Demonstrate with a real clock or model if there are difficulties.  

38 min |
| 6 | **Book 1, page 77**  
**Q.4** See how many of these you can do in 5 minutes.  
Review with whole class. Mistakes corrected on number line.  
Or done orally round the class.  

45 min |
### Lesson Plan 78

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Measurement</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>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.)&lt;sup&gt;5 min&lt;/sup&gt;</td>
<td>Encourage contributions from as many Ps as possible Relate to their everyday lives</td>
</tr>
<tr>
<td><strong>2</strong> Capacity</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>a) Let's measure the capacity of this plastic bucket with this tumbler.&lt;br&gt; (Two Ps to front of class to demonstrate, with T's help)&lt;br&gt; e.g. BB: 9 tumblers &lt; capacity of bucket &lt; 10 tumblers</td>
<td>Ps can keep tally at side of their books</td>
</tr>
<tr>
<td>b) Let's measure the capacity of this plastic bottle with this jam jar.&lt;br&gt; (Another two Ps to demonstrate.)&lt;br&gt; e.g. BB: 3 jam jars &lt; capacity of bottle &lt; 4 jam jars</td>
<td>Ps can keep tally at side of their books Discussion</td>
</tr>
<tr>
<td>Do we know which holds more water, the bucket or the bottle?&lt;br&gt; (No, we need to use the same unit of measure, e.g. the tumbler)&lt;br&gt; Repeat b) using tumblers instead of jam jars.&lt;br&gt; e.g. BB: 6 tumblers &lt; capacity of bottle &lt; 7 tumblers.</td>
<td>Ps can keep tally at side of their books Discussion</td>
</tr>
<tr>
<td>Which holds more, the bucket or the bottle? (bucket)&lt;sup&gt;15 min&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Book 1, page 78</td>
<td>Whole class do first equation</td>
</tr>
<tr>
<td>Q.1 Read: Fill in the missing numbers.&lt;br&gt; Do the first equation on the BB with the whole class.&lt;br&gt; Ps to BB to do each line. Check against number line.&lt;br&gt; Ps do one column at a time, using their number lines to help them.</td>
<td>BB: 4 + □ = 6 + 3&lt;br&gt; 4 + □ = 9&lt;br&gt; □ = 5&lt;br&gt; Monitored, helped Discussion, checking</td>
</tr>
<tr>
<td>Review each column with whole class. Mistakes corrected at class number line.&lt;sup&gt;24 min&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Interlude</td>
<td>Whole class in unison</td>
</tr>
<tr>
<td>Song or rhyme</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Book 1, page 78, Q.2</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>Everyone look at part a). A, come to the number line and put your finger on the '6'. B, come to the BB and be ready to write in the missing number or signs.&lt;br&gt; If we add a number, in which direction must A move? (to the right) If we subtract a number which way must A move? (to the left)&lt;br&gt; Rest of class give instructions to A: 'add 2', A moves finger 2 places to right and tells B to write in '8'. Repeat to '10'.&lt;br&gt; C, come and put your finger on '10'. Move back to 8. What has C done? Class shouts 'taken away 2'. D, come to BB and fill in the box. 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.&lt;br&gt;(Or done as individual work, reviewed at BB with whole class.)&lt;sup&gt;35 min&lt;/sup&gt;</td>
<td>Draw on BB or use enlarged copy master or OHP In unison</td>
</tr>
<tr>
<td>Ps can follow on own number lines too</td>
<td>In chorus, at speed</td>
</tr>
<tr>
<td>Activity</td>
<td>Notes</td>
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<td><strong>Bk1</strong></td>
<td><strong>Lesson Plan 78</strong></td>
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<tr>
<td><strong>5</strong></td>
<td><strong>Activity</strong></td>
</tr>
<tr>
<td><strong>Book 1, page 78</strong></td>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td>Q.3</td>
<td>Read: <em>Fill in the missing numbers</em></td>
</tr>
<tr>
<td>Review with whole class. Deal with parts a) and b) separately. (Or can be done orally round the class.)</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td><strong>40 min</strong></td>
<td>Checking against number line</td>
</tr>
<tr>
<td><strong>45 min</strong></td>
<td>At speed</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>Book 1, page 78, Q.3</strong></td>
</tr>
<tr>
<td>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)</td>
<td>Individual work</td>
</tr>
<tr>
<td>BB: ( 9 - 3 = 6 ) 6 o'clock + 3 hours ( \rightarrow ) 9 o'clock</td>
<td>Discussion about best strategy for solution strategy</td>
</tr>
</tbody>
</table>
### Bk1 | R: Mental counting  
| C: Revision and practice (0 to 10)  
| E: Inequalities

#### Activity  

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Notes</th>
</tr>
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</table>
| 1   | **Oral work**  
Let's see how many different ways we can think of to describe the number 3 (8, 10).  
(e.g. 3: 1 + 2, 5 – 2, 10 – 4 – 3, the next number greater than 2, the 2nd odd number, etc.) | Whole class activity  
Class checks each response  
T writes all cases on BB  
Praise creativity |
| 2   | **Logic sets**  
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. Praise all contributions |
| 3   | **Book 1, page 79**  
Q.1 T points out the two different kinds of arrows (single and double) and explains what they mean.  
Now see how quickly you can fill in all the missing numbers.  
Review at BB with whole class, correcting at number line. | Individual work  
Monitored, helped  
Discussion  
Drawn on BB or use enlarged picture or OHP |
| 4   | **Interlude**  
Song, verse, exercises | Whole class in unison |
| 5   | **Book 1, page 79**  
Q.2 Ps do one part at a time. Review orally round the class.  
Mistakes corrected at number line. | Individual work  
Monitored  
Discussion, checking |
| 6   | **Book 1, page 79**  
Q.3 Listen carefully and try to picture the story in your head.  
Draw the sweets and write down an addition in your book to help you.  
T reads problem several times. Ps work out answer. (2)  
Ask several Ps for their answer and strategy for solution.  
Demonstrate with 2 Ps and real sweets at front of class. | Individual work  
Discussion, agreement  
BB: 1 + 2 + 2 = 5 sweets  
P J  
P J  
P J  
P J  
5 + 0 = 5  
4 + 1 = 5  
3 + 2 = 5  
5 – 0 ≠ 1  
4 – 1 ≠ 1  
3 – 2 ≠ 1  
Julie has eaten ✗ 2 sweets |
| 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, Review at BB with whole class.  
(or can be done as whole class activity) | Individual work  
Discussion on BB.  
Use enlarged copy master or OHP  
Agreement, checking |
### Activity

This lesson will be a test to see what you have learned.

<table>
<thead>
<tr>
<th>Bk1</th>
<th>R:</th>
<th>C: Revision (0–10); test</th>
<th>E:</th>
</tr>
</thead>
</table>

#### 1

**Book 1, page 80**

Q.1 Read: *Fill in even numbers in red and odd numbers in blue.*

- **1st sequence:**
  - Correct numbers (3)
  - Correct colours (1)
- **2nd sequence:**
  - Correct numbers (3)
  - Correct colours (1)

- Individual work (4 min)
- Checking (2 min)

#### 2

**Book 1, page 80**

Q.2 Read: *Fill in the missing numbers and write in what the arrows mean.*

- Individual work (12 min)
- Checking (2 min)

#### 3

**Book 1, page 80**

Q.3 Read: *Which numbers make the statements correct?* (1 mark for each part a, b, c, d)

- Individual work (6 min)
- Checking (2 min)
- Ps may use number lines

#### 4

**Book 1, page 80**

Q.4 Read: *Compare the answers.*

- Individual work (5 min)
- Checking (2 min)
- Ps may use number lines

#### 5

**Book 1, page 80**

Q.5 Read: *Find the rule for each sequence.*

- Individual work (8 min)
- Checking (2 min)
- Ps may use fingers, etc.

- Individual work (4 min)
- Checking (2 min)

---

**TOTAL: 50 marks**
### Lesson Plan 81

**Bk1**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Number line</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>a) Let's count from zero to 20 on the number line. BB: (or on wall)</td>
<td></td>
</tr>
<tr>
<td>b) Let's count backwards from 20 in a relay. P₁ '20', P₂ '19', P₃ '18', etc.)</td>
<td>In chorus (with T pointing to numbers on number line)</td>
</tr>
<tr>
<td><strong>2</strong> Posters 11 and 12</td>
<td>Whole class activity</td>
</tr>
<tr>
<td>Let's look carefully at these posters.</td>
<td>Discussion about the activities</td>
</tr>
<tr>
<td>a) How many children are skiing? (10) Where is the child wearing number 10 (1, 4, 3)? (e.g. 3rd from right, etc.) In which position is: e.g. the child wearing the green scarf? (4th from left), etc.</td>
<td></td>
</tr>
<tr>
<td>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)</td>
<td></td>
</tr>
<tr>
<td>c) How many children are standing around the snowman? (15) (Inner ring + outer ring)</td>
<td>BB: 10 + 3 = 13</td>
</tr>
<tr>
<td>d) Let's count the children who have sledges. (10 sledging, 2 fallen off and 4 just arrived)</td>
<td>BB: 10 + 5 = 15</td>
</tr>
<tr>
<td><strong>20 min</strong></td>
<td>BB: 10 + (2 + 4) = 16</td>
</tr>
<tr>
<td><strong>3</strong> Interlude</td>
<td>Whole class in unison</td>
</tr>
<tr>
<td>Song or rhyme</td>
<td></td>
</tr>
<tr>
<td><strong>22 min</strong></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Book 1, page 81</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td>Q.1 Read: <strong>Mark these numbers with dots on the number line.</strong> 13, 16, 19</td>
<td>Discussion, checking</td>
</tr>
<tr>
<td>Write these numbers in the correct places: 3, 7, 9, 12, 14, 18</td>
<td>(Drawn on BB or use enlarged copy master or OHP)</td>
</tr>
<tr>
<td>Review at BB with whole class. Ps correct mistakes.</td>
<td></td>
</tr>
<tr>
<td><strong>30 min</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Book 1, page 81</td>
<td>Individual work, monitored, helped</td>
</tr>
<tr>
<td>Q.2 Read: <strong>Mark the places of even numbers with red dots and odd numbers with green dots.</strong></td>
<td>Make sure Ps hold cards up in correct order. (Ps should lay out cards on desk first)</td>
</tr>
<tr>
<td>Make sure Ps know the meaning of 'odd' and 'even'.</td>
<td>In chorus</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>35 min</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Activity

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

| 45 min | Discussion, checking |
|        | BB: 10 + 2 = 12 |
|        | 10 + 3 = 13 |
|        | 10 + 6 = 14 |
|        | 10 + 7 = 17 |
|        | 10 + 9 = 19 |

In chorus
Lesson Plan 82

R: Mental counting  
C: Extension numbers to 20  
E: $10 + n$

Activity

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.

Let's all read the additions together. 10 min

2. Money

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), two '10p' + no '1p' (units).

... 20 min

3. Interlude

Exercises or action song 22 min

4. Book 1, page 82

Q.1 Read: Join up the equal values.

T explains task first, making sure Ps know that the amounts in the columns are not in order.

Review at BB with whole class. Mistakes discussed/corrected.

Who can come and show these numbers on the number line? 30 min

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),

P₁ says a 1-digit number (e.g. 5 = 5 units), P₂ 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

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

Notes

Whole class activity
(or use Cuisennaire rods or plastic cubes stuck together)

BB: 10 + 1 = 11
10 + 2 = 12
10 + 10 = 20

Whole class in unison

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
17 = 1 ten + 7 units
20 = 2 tens + 0 units

Individual work in unison

Book, page 82

T monitoring, helping, praising Discussion, checking, agreement

Drawn on BB or use enlarged copy master or OHP

Involve several Ps

Whole class in unison

Individual work

T monitoring, discussion

At speed round class

Individual work, monitored

Drawn on BB or use enlarged copy master or OHP

Whole class in unison

At speed, T monitoring

(or done as individual work)
# Bk1 Lesson Plan 83

### Activity

#### 1 Practice on the Number Line (0–20)

- **R**: Number line
- **C**: Extending numbers to 20. Operations without crossing 10.
- **E**: Logic puzzle

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole class activity</td>
<td>7 min</td>
</tr>
<tr>
<td>Agreement, checking</td>
<td></td>
</tr>
<tr>
<td>Involve several Ps</td>
<td></td>
</tr>
<tr>
<td>Ps who are correct may give the next task</td>
<td></td>
</tr>
</tbody>
</table>

- T asks Ps to come out and show:
  - various numbers \(n\) e.g. 15
  - numbers so many less than (more than) \(n\).
    - e.g. 3 less than (more than) 15 is 12 (18)
  - starting at \(n\), so many steps to the right (left), etc.
    - e.g. 2 steps to the right (left) of 15 is 17 (13)

#### 2 Shopping

- **R**: Whole class (paired) activity
- **C**: T helping, encouraging
- **E**: Praise

- Ps come to front in pairs. **A** is the shopkeeper, **B** is the customer.
- Role play: e.g. 
  - **A**: How can I help you?
  - **B**: I would like to buy this pencil. How much does it cost?
  - **A**: It costs 13p.
  - **B**: Opens purse and takes out 13p (1 ten + 3 '1's)
  - **A**: Puts pencil in bag and says 'Here you are.'
  - **B**: Thank you. Goodbye!

Who can come and write an addition about the story?
Repeat for other pairs of Ps and different amounts (to 20p).

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole class (paired) activity</td>
<td>15 min</td>
</tr>
<tr>
<td>T helping, encouraging</td>
<td></td>
</tr>
<tr>
<td>Praise</td>
<td></td>
</tr>
<tr>
<td>Use real purse and real or play money.</td>
<td></td>
</tr>
<tr>
<td>BB: 1 ten + 3 units = 13</td>
<td></td>
</tr>
<tr>
<td>Encourage creativity</td>
<td></td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual work, monitored, helped</td>
<td>20 min</td>
</tr>
<tr>
<td>Discussion (drawn on BB or use enlarged copy master or OHP)</td>
<td></td>
</tr>
<tr>
<td>Agreement, checking</td>
<td></td>
</tr>
</tbody>
</table>

#### 4 Interlude

- **R**: Relaxation

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole class resting</td>
<td>22 min</td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual work, monitored, helped</td>
<td>27 min</td>
</tr>
<tr>
<td>Discussion (drawn on BB or use enlarged copy master or OHP)</td>
<td></td>
</tr>
<tr>
<td>Agreement, checking</td>
<td></td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual work, monitored monitored</td>
<td>35 min</td>
</tr>
<tr>
<td>Ps may use number lines to help them</td>
<td></td>
</tr>
<tr>
<td>Mistakes discussed at number line. Self-correction</td>
<td></td>
</tr>
</tbody>
</table>

#### 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.)

<table>
<thead>
<tr>
<th>Notes</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual work</td>
<td>40 min</td>
</tr>
<tr>
<td>Monitored</td>
<td></td>
</tr>
<tr>
<td>Praise</td>
<td></td>
</tr>
</tbody>
</table>

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### Activity 7

**Logic Puzzle**

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?*

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.)

**Logical solution** using the least number of weighings (2):

Divide up the coins into 3 groups of 3.

1. Weigh first group against 2nd group;
   - 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.

2. a) Weigh two coins from the third group:
   - i) if scales are even, then the fake coin is the one not weighed.
   - ii) if one side is lighter than the other, it contains the fake coin.
   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.

**Notes**

Repeat one or two times

Ask several Ps

Discussion,

BB: $3 + 3 + 3 = 9$

Discussion, agreement, checking

---

45 min
<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **1** Practice on the Number Line (0–20) | Whole class activity  
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.  

**10 min** |

| 2 | Problem | Individual work, monitored  
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 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.  
Demonstrate with Ps at front of class.  

**15 min** |

| 3 | Book 1, page 84 | Individual work  
Q.1 Read: *At which numbers have we drawn the pictures?*  
Talk about the different animals in the picture  
Review with whole class.  
B (C), come and draw a red dot at the number 8 (18).  
D (E) come and draw a green dot at the number 7 (17)  

**20 min** |

| 4 | Interlude | Whole class in unison  
Action song  

**22 min** |

| 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, . . .’  

**30 min** |

| 6 | Book 1, page 84, Q.3 | Whole class activity  
Read: *What is the rule? Fill in the missing numbers and signs.*  

| 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'  
We have to go from 13 to 11. What have we done? (Taken away 2)  
Y, come and fill in the missing sign, say the equation and write it on the BB. Y: 'thirteen minus two equals eleven'  
Continue until the line is completed. Discuss what the rule might be.  
(Rule: Add 3, then take away 2.) Check it is correct.  

| b) | As above. (Rule: Take away 8, then add 7.) Check it is correct.  

**38 min** |
<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book 1, page 84</strong></td>
<td>Individual work</td>
</tr>
<tr>
<td>Q.4 Read: Write equations about the moves. Where does chick get to if he starts at: . . .</td>
<td>Class kept together on exercises</td>
</tr>
<tr>
<td>Revise: moving to the right on the number line is 'adding' moving to the left on the number line is 'taking away'</td>
<td>Discussion, agreement, checking</td>
</tr>
<tr>
<td>T reads out one part at a time, pupils put finger on starting number and follow instructions. Ps write down the equation.</td>
<td></td>
</tr>
<tr>
<td>Review all parts with whole class, Ps reading out their equations. Mistakes corrected on class number line.</td>
<td></td>
</tr>
</tbody>
</table>

---

**Lesson Plan 84**

45 min
<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Making 11</td>
<td>Whole class activity Involve several Ps</td>
</tr>
<tr>
<td>Look at the posters and find things which together make 11.</td>
<td>BB: 3 + 3 + 5 = 11 2 + 4 + 3 + 1 + 1 = 11 11 + 0 = 11 5 + 3 + 2 + 1 = 11</td>
</tr>
<tr>
<td><em>Poster 3:</em> e.g. 3 trees + 3 bushes + 5 hedgehogs 2 squirrels + 4 rabbits + 3 frogs + 1 tortoise + 1 pond</td>
<td>Discussion, agreement, checking</td>
</tr>
<tr>
<td><em>Poster 6:</em> e.g. 11 swifts 5 ducks + 3 butterflies + 2 mushrooms + 1 snail</td>
<td></td>
</tr>
<tr>
<td>Look around the classroom and find things which make 11.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Soft ball play</td>
<td>Whole class activity Involve several Ps At speed</td>
</tr>
<tr>
<td>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, . . .)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Pictures of 11</td>
<td>Involve several Ps</td>
</tr>
<tr>
<td>Look at the different pictures of 11. (T talks about each one.) Talk about birthdays, ages, house numbers, anything involving 11</td>
<td>Whole class discussion about 11 as a 2-digit number</td>
</tr>
<tr>
<td>BB:</td>
<td>In unison</td>
</tr>
<tr>
<td>11</td>
<td>T checking who is having problems</td>
</tr>
<tr>
<td>XI</td>
<td>Praising only</td>
</tr>
<tr>
<td>How many digits does it have? (2 digits: 1 ten and 1 unit) Check, agreement</td>
<td></td>
</tr>
<tr>
<td>• Knock on your desk 11 times.</td>
<td>Checking, agreement</td>
</tr>
<tr>
<td>• Clap your hands 11 times.</td>
<td></td>
</tr>
<tr>
<td>• Click your fingers 11 times.</td>
<td></td>
</tr>
<tr>
<td>• Blink 11 times</td>
<td></td>
</tr>
<tr>
<td>• Show me 11 using your number cards. . . . now!</td>
<td></td>
</tr>
<tr>
<td>• The person who is 11th in this row stand up.</td>
<td></td>
</tr>
<tr>
<td>A, come and point to 11 on the number line. Is he/she correct?</td>
<td></td>
</tr>
<tr>
<td>B, come and drop 11 marbles into this bag. Is he/she correct?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Book 1, page 85</td>
<td>Whole class in unison</td>
</tr>
<tr>
<td>T writes a large 11 on BB, saying how to write it.</td>
<td>T checking, praising</td>
</tr>
<tr>
<td>Write a big 11 in the air, on your desk, on you neighbour's back.</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td>C, come and write a big 11 on the BB. Is he/she correct?</td>
<td>BB: 11 – 1 = 10</td>
</tr>
<tr>
<td>Who can do it better?</td>
<td></td>
</tr>
<tr>
<td>Q.1 Read: Continue the pattern.</td>
<td></td>
</tr>
<tr>
<td>Who can read the equation? How many times did you write it? (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Interlude</td>
<td>Whole class resting</td>
</tr>
<tr>
<td>Relaxation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© CIMT, Plymouth University
<table>
<thead>
<tr>
<th>Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book 1, page 85</strong></td>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td><strong>Q.2</strong></td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td>Read: <em>Complete the pictures to make 11.</em></td>
<td>Discussion, checking</td>
</tr>
<tr>
<td>T explains task. Drawings can be very rough – dots or crosses.</td>
<td>BB:</td>
</tr>
</tbody>
</table>
| Review with whole class. | Balloons:  
| **X,** how many balloons did you draw? (3) | 8 + 3 = 11  
| Come and write an equation about it. Is he/she correct? | 11 – 3 = 8  
| Who can write another equation about it? | Balls:  
| Similar for other 3 pictures. | 5 + 6 = 11  
| | 11 – 6 = 5  
| **28 min** | etc. |
| **Q.3** | Individual work, monitored |
| Read: *Complete the table.* \(a + b = 11, \ b = 11 - a\) | Discussion, checking |
| Review orally round class, checking by substituting for \(a\) and \(b\). | Agreement |
| **33 min** | |
| **Q.4** | Whole class activity |
| Read: *What do the pictures tell you? Write equations about them.* | Drawn on BB or use enlarged copy master or OHP |
| Look at the first picture. How many of each kind of flower are there? | Discussion, checking |
| How many flowers are in each row? How many rows? etc. | e.g. BB: |
| **Y,** come and write an addition about it. Is he/she correct? | Flowers:  
| Who thinks something else? etc. | 5 + 5 + 1 = 11  
| **Z,** come and write a subtraction about it. Is he/she correct? | Fruit:  
| Who thinks something else? etc. | 4 + 2 + 5 = 11  
| Repeat for other two pictures. Encourage creativity. | Candles:  
| (Or done as individual work, reviewed with whole class) | 11 – 4 = 7  
| | etc. |
| **40 min** | |
| **Q.5** | Individual work, monitored |
| Read: *Write in the answers as Roman numerals.* | Discussion |
| Remind Ps how the numbers 5 (V) and ten (X) are written, and that \(\text{VI} = 5 + 1 = 6'\) and \(\text{IX} = 10 - 1 = 9',\) etc. | Agreement, checking |
| Review at BB with whole class. Ps write solutions then class reads out equations (with T's help). | Self-correction |
| | In unison |
| **45 min** | |
## Bk1

### Lesson Plan 86

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R:</strong> Mental operations</td>
<td><strong>Lesson Plans</strong></td>
</tr>
<tr>
<td><strong>C:</strong> Addition facts and operations to 11</td>
<td></td>
</tr>
<tr>
<td><strong>E:</strong> Using a and b for unknown values</td>
<td></td>
</tr>
</tbody>
</table>

### Activity

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Mental practice</strong></td>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td></td>
<td>T says an addition/subtraction (e.g. 10 + 4, 17 – 12, 8 + 3, 11 – 4, etc.) and Ps give answer.</td>
<td>Whole class activity</td>
</tr>
<tr>
<td></td>
<td><strong>5 min</strong></td>
<td>At speed</td>
</tr>
<tr>
<td></td>
<td><strong>2</strong></td>
<td><strong>Dominoes</strong></td>
</tr>
<tr>
<td></td>
<td>We are going to draw (or stick) dots on the dominoes to make 11 altogether. <strong>A</strong>, come and draw dots on one side of the domino. <strong>B</strong>, come and complete the other side to make 11. What addition have you made? (e.g. 4 + 7) (Continue until all ways shown.) How should we put the dominoes in order?</td>
<td>Whole class activity</td>
</tr>
<tr>
<td></td>
<td>e.g. <strong>BB:</strong></td>
<td>Have blank dominoes stuck to BB (enlarged copy master)</td>
</tr>
<tr>
<td></td>
<td>2 + 9</td>
<td>Discussion, agreement</td>
</tr>
<tr>
<td></td>
<td>3 + 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 + 7</td>
<td></td>
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<td></td>
<td>5 + 6</td>
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<tr>
<td></td>
<td><strong>12 min</strong></td>
<td>Class reads equations in unison: 'two plus nine equals eleven' etc.</td>
</tr>
<tr>
<td></td>
<td><strong>3</strong></td>
<td><strong>Book 1, page 86</strong></td>
</tr>
<tr>
<td></td>
<td>Q.1 Read: <strong>Join up the equations with the correct picture. Fill in the missing numbers.</strong> T explains task. Review at BB with whole class. Errors discussed.</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td></td>
<td><strong>18 min</strong></td>
<td>Discussion, agreement, checking, self-correcting</td>
</tr>
<tr>
<td></td>
<td><strong>4</strong></td>
<td><strong>Interlude</strong></td>
</tr>
<tr>
<td></td>
<td>Action song</td>
<td>Enlarged copy master or OHP</td>
</tr>
<tr>
<td></td>
<td><strong>20 min</strong></td>
<td>Whole class in unison</td>
</tr>
<tr>
<td></td>
<td><strong>5</strong></td>
<td><strong>Making 11</strong></td>
</tr>
<tr>
<td></td>
<td>Show me on your desks different ways to make 11 using only two number strips. <strong>X</strong>, 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) <strong>Y</strong>, come and show us where we should write them. Let's all read them together: 'eleven plus zero equals eleven', . . .</td>
<td>Individual work (or in pairs), monitored</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or use Cuisenaire rods or plastic cubes stuck together)</td>
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<tr>
<td></td>
<td></td>
<td>BB:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(11 + 0 = 11)</td>
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<tr>
<td></td>
<td></td>
<td>10 + 1 = 11</td>
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<tr>
<td></td>
<td></td>
<td>9 + 2 = 11</td>
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<td></td>
<td></td>
<td>8 + 3 = 11</td>
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<tr>
<td></td>
<td></td>
<td>. . .</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 + 10 = 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0 + 11 = 11)</td>
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<tr>
<td></td>
<td><strong>28 min</strong></td>
<td>Enlarged copy master or OHP</td>
</tr>
<tr>
<td></td>
<td><strong>6</strong></td>
<td><strong>Book 1, page 86</strong></td>
</tr>
<tr>
<td></td>
<td>Q.2 Read: <strong>How many books are on each shelf? Write it down as an addition.</strong> Deal with one part at a time. Review at BB with whole class.</td>
<td>Individual work, monitored</td>
</tr>
<tr>
<td></td>
<td><strong>32 min</strong></td>
<td>Discussion, agreement</td>
</tr>
<tr>
<td></td>
<td><strong>7</strong></td>
<td><strong>Book 1, page 86</strong></td>
</tr>
<tr>
<td></td>
<td>Q.3 Read: <strong>Colour in the houses as shown</strong> Revise meaning of 'odd', 'even', '1-digit', '2-digit'. As a final check, write each answer in the roof of the house. <strong>Z</strong>, what colour did you make the roof of the 3rd house from left? Who agrees? Who used another colour? Why? etc.</td>
<td>Individual work</td>
</tr>
<tr>
<td></td>
<td><strong>38 min</strong></td>
<td>Monitored, helped</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discussion, checking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agreement, correcting</td>
</tr>
<tr>
<td>Activity</td>
<td>Notes</td>
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</tbody>
</table>
| Lesson Plan 86 | **Book 1, page 86, Q.4**<br>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?  
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 $b$?  
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?  
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, come and fill in the missing number. Is B correct? Let's check.  
Continue until all columns are completed. (Ps fill in table in their books too.)  
Who can complete the equation for $a$? Who agrees? C, choose a column from the table to check whether the equation is correct.  
Who can complete the equation for $b$? Who agrees? 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?  
Write your answer in the box. E, what did you put? (7) Who agrees? Who had something else?  
Let's check. F, which column in the table shows this? | Whole class activity<ref>Drawn on BB or use enlarged copy master or OHP</ref>  
BB: $a + 3 = b$  
$5 + 3 = 8$  
$\square + 3 = 10$  
$7 + 3 = 10$  
Discussion etc.  
$\boxed{a = b - 3}$ ✓  
Check: $5 = 8 - 3 = 5$ ✓  
$\boxed{b = a + 3}$ ✓  
Check: $10 = 7 + 3 = 10$  
Individual work  
Praising only  
(Demonstration if necessary)  
BB: $a + b = 11$  
Check: $4 + 7 = 11$ ✓ |
**Activity**

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**

2. **Making 11**
   - Look at the picture on the BB.
   - Who can come and write a 3-part addition about one of the strips?
   - **BB:**
     - \[2 + 8 + 1 = 2 + 9 = 11\]
     - \[3 + 7 + 1 = 3 + 8 = 11\]
     - \[6 + 4 + 1 = 6 + 5 = 11\]
     - \[9 + 1 + 1 = 9 + 2 = 11\]
   - How can we change it into a 2-part addition? P: change (8 + 1) for 9, etc. Let’s all read the additions together.
   - **15 min**

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)
   - Use these circles to help you fill in the missing numbers.
   - Review with whole class. Use counters if there are difficulties.
   - Show that: a) \[5 + 6 = 5 + (5 + 1) = 10 + 1 = 11\]
   - \[6 + 5 = 6 + (4 + 1) = 10 + 1 = 11\]
   - \[11 − 5 = (11 − 1) − 4 = 10 − 4 = 6\]
   - \[11 − 6 = (11 − 1) − 5 = 10 − 5 = 5\]
   - 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**

4. **Interlude**
   - Song, rhyme, exercises
   - **24 min**

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.
   - **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?
   - Which line is longest (shortest)? Make an inequality about the lines.
   - **BB:** \[9 < 11 < 12\]
   - **32 min**
<table>
<thead>
<tr>
<th>Bk1</th>
<th>Lesson Plan 87</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity</strong></td>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>Book 1, page 87</strong></td>
</tr>
</tbody>
</table>
| 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.  
40 min |
| | Individual work  
Monitored, helped  
Discussion, checking |
| **7** | **Book 1, page 87** |
| Q.4  | a) Read: *Join up the even numbers in increasing order.*  
Revise meaning of ‘even’ and ‘increasing’,  
What did you draw? (rabbit)  

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’  
45 min |
| | Individual work  
Monitored, helped  
Discussion, checking  
Discussion  
Individual work  
In unison |
### Lesson Plan 88

<table>
<thead>
<tr>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R:</strong> Mental addition</td>
<td>Whole class activity</td>
</tr>
<tr>
<td><strong>C:</strong> Operations, equations to 11</td>
<td>At speed round class</td>
</tr>
<tr>
<td><strong>E:</strong> Problems in context</td>
<td>Ps may use fingers if stuck</td>
</tr>
</tbody>
</table>

#### 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

#### 2 Addition to 11
- Tell me a 2-member addition for 11. (e.g. 2 + 9, 7 + 4, 6 + 5, ...)
  - 8 min

#### 3 Book 1, page 88
- **Q.1** Read: *Find the missing numbers.* *Mark them on the number line.*
  - Look at the inequality in the top row.
  - Which number is in the middle of the inequality? (11)
  - 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.
  - Continue with the equations in this way too.
  - Review at BB with whole class. Let's read out the statements.
  - 14 min

#### 4 Book 1, page 88, Q.2
- Everyone look at part a). A, come to the number line and put your finger on the '3'. B, come to the BB and be ready to write in the missing numbers or signs.
- If we add a number, in which direction must A move? (to the right)
- If we subtract a number, which way must A move? (to the left)
- Rest of class give instructions to A: 'add 5', A moves finger 5 places to right and tells B to write in '8'. Repeat to '11'.
- C, come and put your finger on '11'. Move back to 8. What has C done? Class shouts 'taken away 3'. D, come to BB and fill in the box.
- 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 plus three equals eleven; 11 minus three equals eight, ...'
- (Or done as individual work, reviewed at BB with whole class.)
  - 20 min

#### 5 Interlude
- Song, rhyme, exercises
  - 22 min

#### 6 Book 1, page 88
- **Q.3** Read: *Fill in the missing numbers.*
  - Use your number line to help you. Review orally round class.
  - 27 min
<table>
<thead>
<tr>
<th>Activity</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Listen carefully and try to picture the story in your head. You can use what you like to help you. Show me the answer with a number card when I say.</td>
</tr>
<tr>
<td></td>
<td><em>John was going to the lake for the day.</em></td>
</tr>
<tr>
<td></td>
<td><em>He bought a train ticket for £6. When he got off the train he caught a bus. How much did his bus ticket cost if he spent £11 altogether on travel?</em></td>
</tr>
<tr>
<td></td>
<td>Show me with a number card . . . now! (5)</td>
</tr>
<tr>
<td></td>
<td><em>E, come and explain to us how you worked out the answer. Is he/she correct? Who thinks something different? etc.</em></td>
</tr>
<tr>
<td></td>
<td>Discuss strategy for solution (BB) <em>Answer: The bus ticket cost £5.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Book 1, page 88</th>
<th>Q.4 Read: <em>Kate and Mary had 20p in total. Kate had 11p. How much money did Mary have?</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Talk about strategy for solution (as above).</td>
</tr>
<tr>
<td></td>
<td>Review at BB with whole class. <em>Answer: Mary had 9p.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Book 1, page 88</th>
<th>Q.5 Read: <em>Fill in the missing numbers.</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Review orally round the class. Mistakes corrected at number line.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole class activity (e.g. counters, number/sign/shape cards, etc.)</td>
</tr>
<tr>
<td>Repeat a few times.</td>
</tr>
<tr>
<td>Give Ps time to think</td>
</tr>
<tr>
<td>Discussion, agreement</td>
</tr>
<tr>
<td>BB: 6 + □ = 11</td>
</tr>
<tr>
<td>11 – 6 = 5</td>
</tr>
<tr>
<td>Individual work</td>
</tr>
<tr>
<td>Monitored, helped</td>
</tr>
<tr>
<td>Discussion, agreement</td>
</tr>
<tr>
<td>BB: 11 + □ = 20</td>
</tr>
<tr>
<td>20 – 11 = 9</td>
</tr>
<tr>
<td>Individual work</td>
</tr>
<tr>
<td>Monitored</td>
</tr>
<tr>
<td>Checking, correcting</td>
</tr>
</tbody>
</table>