PROCESS SKILLS IN PROBLEM SOLVING (L2) CONTENTS

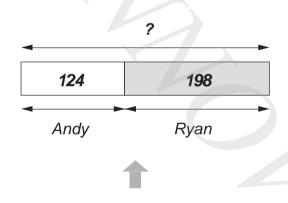
Part I	The Model Approach
Unit 1	Addition Within 1000
	(Part-Whole Model / Putting-Together Concept / Adding-On Concept)
Unit 2	Subtraction Within 1000
	(Part-Whole Model / Set-And-Subset Concept / Taking-Away Concept)
Unit 3	Addition and Subtraction Involving Comparison
	(Comparison Concept I, II, III)
Unit 4	*Addition And Subtraction - Two-Step Word Problems
Unit 5	Multiplication And Division By 2 And 3
	(Repeated-Addition Concept / Sharing Concept / Grouping Concept)
Unit 6	Multiplication And Division by 4, 5 And 10
Unit 7	*Four Operations51
Part II	The Heuristic Approach
Unit 8	Systematic Listing I
Unit 9	Work Backwards 65
Unit 10	Look For Pattern68
Unit 11	. Restate The Problem74
Unit 12	Praw A Diagram77
Unit 13	Systematic Listing II (Spatial Visualisation)
Unit 14	Combined Strategies 86
Answer k	(ey & Detailed Solutions89
	n New Publications
.^iviore cr	allenging problems especially for advanced pupils.

Example 1B (Putting-Together Concept)

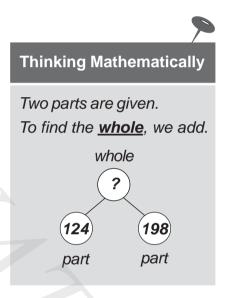
Solve the problem.

In a contest, Andy blew 124 balloons and Ryan blew 198 balloons. How many balloons did they blow altogether in the contest?

Step 1 Represent the information using model.



124 --- smaller number --- shorter bar 198 --- bigger number --- longer bar



Step 2 Write the number sentence.

Step 3 Write the answer statement.

They blew 322 balloons altogether in the contest.

*Addition And Subtraction - Two-step Word Problems

Example 4A

Solve the problem.

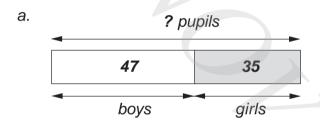
There are 47 boys and 35 girls in an Art Club.

18 of them are Primary 1 pupils.

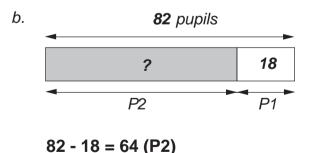
The rest are Primary 2 pupils.

How many Primary 2 pupils are there in the Art Club?

Step 1 Draw the model and write the number sentence.



$$47 + 35 = 82$$
 (Total)



Step 2 Write the answer statement.

There are 64 Primary 2 pupils in the Art Club.

Thinking Mathematically

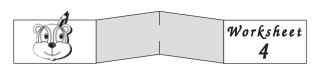
What do we need to find first?

Ans: Total number of pupils

To find the **whole**, we add.

Then, to find **a part**, we subtract.





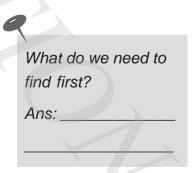
Solve each problem. Show your model, working and statement clearly.

*1. Sam had 145 blue marbles and 90 red marbles. He gave away 68 marbles. How many marbles had he left in the end?

Thinking Mathematically	
What do we need to find first?	
Ans:	

He had _____ marbles left in the end.

*2. Uncle Wee had 124 red apples and 218 green apples. He threw away 47 rotten apples. How many apples had he left in the end?



He had _____ apples left in the end.