

UNIT 9 Code 3 of 9

Teacher Resource Material

Key Stage: 3 or 4

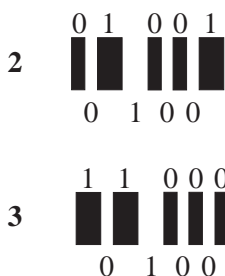
Target: Mainstream Year 8/9 ; coursework for GCSE

Teaching Notes

This unit deals with yet another type of bar code, very different from EAN codes (Unit 3) and ITF symbols (Unit 8) in that it can be used to code both numbers and letters. Hence it has very wide-ranging applications; for example, library codes, labelling of blood samples, hospital patient identification numbers, etc.

Solutions and Notes

Exercise 1



- Activity 1*
- a) 4 patterns: 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1
 - b) 10 patterns: 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0
 1 0 1 0 0 0 1 0 1 0 0 0 1 0 1
 1 0 0 1 0 0 1 0 0 1 0 0 0 1 1

c) $10 \times 4 = 40$ patterns; so you can code letters (26) and digits (10) but not all symbols, etc.

	THICK	No. of Patterns	Combinations for Code
BARS	2	10	} 40
SPACES	1	4	
BARS	3	10	} 10
SPACES	0	1	
BARS	1	5	} 30
SPACES	2	6	
BARS	0	1	} 4
SPACES	3	4	
Total			84

Exercise 2

* + 8 3 2 7 8 F 8 G 9 H 0 I 1 1 P *

UNIT 9 *Code 3 of 9*

Teacher Resource Material (continued)

Exercise 3

Activity 2 Its advantage is that it can code numbers and letters; its disadvantage is that it requires codes of length 9 to do it.