

Contributed by Neil Bayles of Woden Valley High School

a	b	c	d	e		
f						g
h					i	
j				k		
m			n			
		o				
	p					

**ACROSS**

- (a) Divisible by 3
- (f) Divisible by 11
- (h) The product of a 2 digit number and the same number reversed
- (i) A prime number
- (j) The residues of mod 7 (not necessarily in numerical order)
- (m) A perfect square
- (n) A perfect cube
- (o) A number whose digits have the sum of 15
- (p) The number is divisible by 5

**DOWN**

- (a)  $40521_{(base\ 10)}$  written to base 8
- (b) A number of the form  $n^n$
- (c) A multiple of 397
- (d) The first three digits are the same (but in the reverse order) as the last three digits; and the middle digit equals the difference between the second and the third digits
- (e) A multiple of (i) across
- (g)  $2 \times (p)$  across + (a) across + (f) across
- (i) The reverse of (f) across
- (k) Four consecutive integers
- (o) The difference between the sum of the digits in the upper triangle of the crossnumber and the sum of the digits in the lower triangle of the crossnumber

Note: 0 may not begin a number (e.g.  $3^2 = 09$ ) but may begin a list.