



## Huli

The Huli language is a Trans-New Guinea language spoken in Papua New Guinea. Whereas our 'arabic' numbers assume 10 as their base, Huli's numerical system uses a different base from any other known language. The table shows, in random order, how Huli expresses the perfect squares (i.e. the squares of whole numbers:  $1^2 = 1$ ,  $2^2 = 4$ , and so on) from 1-100.

A	ngui ki, ngui tebone-gonaga waragaria
B	mbira
C	ngui dau, ngui waragane-gonaga waragaria
D	nguira-ni pira
E	nguira-ni mbira
F	dira
G	maria
H	ngui tebo, ngui mane-gonaga maria
I	ngui ma, ngui dauni-gonaga maria
J	ngui waraga, ngui kane-gonaga pira

**Q.3.1** Assign each of these Huli numbers its arabic equivalent in the answer sheet.

The next table shows four consecutive numbers written in increasing order; so  $b = a + 1$ ,  $c = b + 1$ , and  $d = c + 1$ .

a	ngui ka, ngui haline-gonaga bearia
b	ngui ka, ngui haline-gonaga hombearia
c	ngui ka, ngui haline-gonaga haleria
d	ngui ka, ngui haline-gonaga deria

**Q.3.2** Assign the first of these Huli numbers (i.e. #a) its arabic equivalent in the answer sheet.

**Q.3.3** Supply Huli translations for the arabic numbers in the answer sheet.

**Scoring (max 21)**

- **3.1** 1 point for each correct cell (max 10)
- **3.2** 1 point (max 1)
- **3.3** 1 point for each correct cell (max 10)
  - accept kira or kiria
- Try not to penalise the same error twice.

<b>Q.3.1</b>	A	B	C	D	E	F	G	H	I	J
	36	1	81	25	16	9	4	49	64	100
<b>Q.3.2</b>	a = 116									

<b>Q.3.3</b>	2	<u>kiria</u>	4	maria
	6	waragaria	7	karia
	22	nguira-ni karia		
	44	ngui ki, ngui tebone-gonaga deria		
	66	ngui ma, ngui dauni-gonaga waragaria		
	77	ngui dau, ngui waragane-gonaga kiria		
	88	ngui dau, ngui waragane-gonaga haleria		
	173	ngui bea, ngui hombeane-gonaga <u>haliria</u> (accept halira)		

ngui bea, ngui hombeane-gonaga halira

**Comment**

1	mbira	9	dira
2	<u>kiria</u> ~ (ngui) ki	10	pira
3	(ngui) tebo ~ tebone(-gonaga)	11	bearia
4	maria ~ (ngui) ma ~ mane(-gonaga)	12	hombearia
5	(ngui) dau ~ dauni(-gonaga)	13	<u>haleria</u>
6	waragaria ~ (ngui) waraga ~ waragane(-gonaga)	14	deria
7	(ngui) ka ~ kane(-gonaga)	15	nguira-ni
8	<u>haliria</u> ~ haline(-gonaga)		

