

## Revision 2: Common Heuristics for P4&5

### GUIDED EXAMPLE 1

(Henry Park Pri Sch)

8. Each of the figures below is made up of 1-cm sticks.

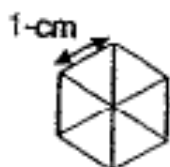


Figure 1



Figure 2

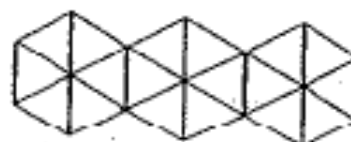


Figure 3

The table below shows the number of sticks used for each figure and the perimeter of each figure.

Figure Number	Number of 1-cm sticks	Perimeter
1	12	6
2	23	10
3	34	14
4		

(a) Complete the table for Figure 4.

[ 1 ]

(b) Which Figure Number will have a perimeter of 1298 cm?

**GUIDED EXAMPLE 2**

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(Red Swastika Sch)

- 5 Look at the number patterns in the squares. What is the missing number in the square?

$2x$	$6x$
$x$	$3x$

$4a$	$12a$
$2a$	$6a$

$6h$	$18h$
$3h$	

**GUIDED EXAMPLE 3**

(Nanyang Pri Sch)

- 15 The sequence of the figures below is formed by unit squares. Study the patterns carefully and answer questions (a), (b) and (c).



Figure 1

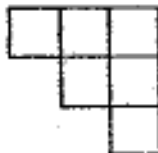


Figure 2

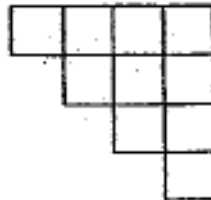


Figure 3

- (a) How many unit squares are there in Figure 5?  
Write your answer in the table below.

Figure	No. of unit squares
1	3
2	6
3	10
...	...
5	

[1]

- (b) Which figure has a total of 36 unit squares?

- (c) How many unit squares are there in Figure 50?

**GUIDED EXAMPLE 4**

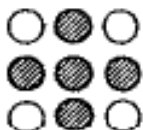
(Rosyth Pri Sch)

- 11 Study the pattern carefully and answer the questions that follow.  
 Show your workings clearly in the space provided and write your answers in the blanks.

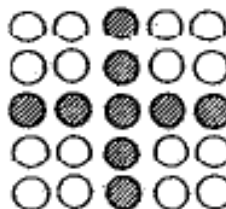
Pattern 1



Pattern 2



Pattern 3



Pattern Number	Number of patterned circles	Number of white circles	Total number of circles
1	1	0	1
2	5	4	9
3	9	16	25
4	13	36	49
7	(a) _____ (1m)	(b) _____ (1m)	
12			(c) _____ (2m)

**GUIDED EXAMPLE 5**

(CHIJ St Nicholas Girls')

- 18) Study the figures carefully.  
Each figure is made up of sticks, circles and triangles.

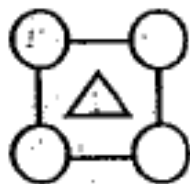


Figure 1

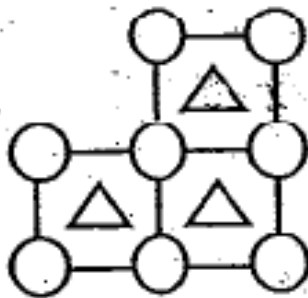


Figure 2

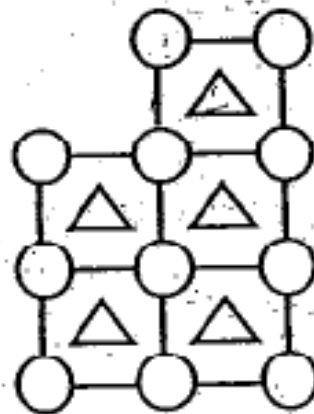


Figure 3

- (a) How many circles will there be in Figure 38?
- (b) In which figure will there be 123 triangles?
- (b) How many sticks will be needed to form Figure 150?