



Name: \_\_\_\_\_

Date: \_\_\_\_\_

### P4 Problem Sum Worksheet

#### Topic : Number Pattern

#### Question 1

George made a pattern using toothpicks. The first 3 figures are shown below.

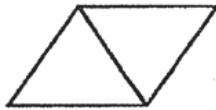


Figure 1

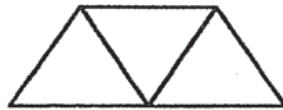


Figure 2

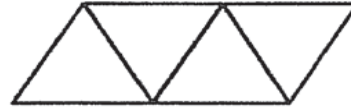


Figure 3

Figure	Number of toothpicks used
1	5
2	7
3	9
⋮	⋮
⋮	⋮
⋮	⋮

- (a) How many toothpicks did George use for **Figure 10**?
- (b) Which figure did George use **151** toothpicks to make?

Show your workings clearly below.

**Question 2**

The pattern below is made up of identical squares and circles.

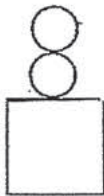


Figure 1

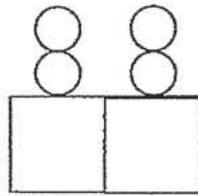


Figure 2

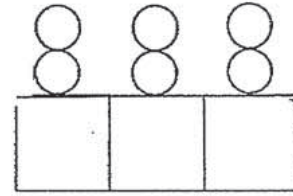
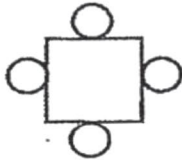


Figure 3

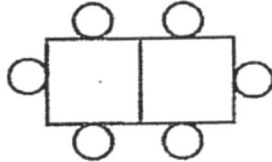
- (a) How many squares are there in Figure 4? [1 mark]
- (b) How many circles are there in Figure 6? [1 mark]
- (c) Which figure has a total of 72 squares and circles? [2 marks]

**Question 3**

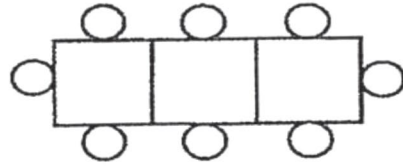
Barney used circles and squares to make patterns as shown below.



Pattern 1



Pattern 2



Pattern 3

- (a) How many circles were there in Pattern 102?
- (b) Barney made a pattern with 52 circles. How many squares were there in this pattern?