1. Here are some patterns made of squares.


Pattern number 1


Pattern number 2


Pattern number 3
(a) In the space, below draw Pattern number 4

## Pattern number 4

(b) Complete the table

| Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of squares | 8 | 11 | 14 |  |  |

2. Here is part of a sequence of patterns made from circles.


Pattern number 1

Pattern number 2

Pattern number 3
(a) In the space, below draw Pattern number 4

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Pattern number 4
(b) Complete the table

| Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number of circles | 6 | 8 | 10 |  |  |

Turn over for more questions and answers
3. Here is part of a sequence of patterns made from rectangles and circles.


Pattern number 1


Pattern number 2

In the space, below draw Pattern number 4
4. Here are some patterns made from dots and sticks.


Pattern number 1


Pattern number 2


Pattern number 3
(a) In the space, below complete Pattern number 4


Pattern number 4
(b) Complete the table

| Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of dots | 5 | 8 | 11 |  |  |

Answers

1a)

2a)



| 1b) Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of squares | 8 | 11 | 14 | 17 | 20 | | 2b) Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Number of circles | 6 | 8 | 10 | 12 | 14 |


| 4 b$)$ Pattern number | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of dots | 5 | 8 | 11 | 14 | 17 |

