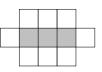
sequence: arithmetic strand 4

1. Here are some patterns made of squares.



Pattern number 1



Pattern number 2



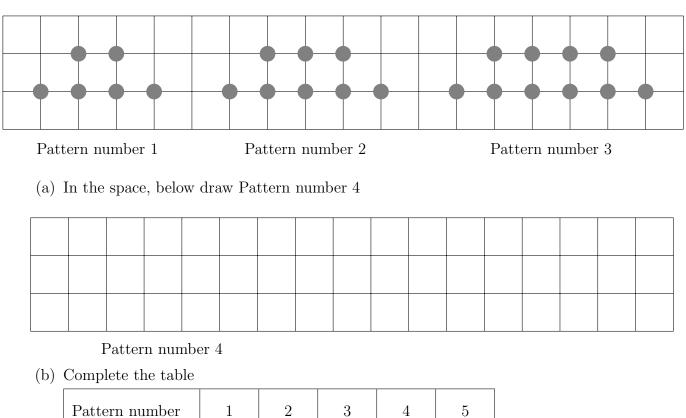
Pattern number 3

(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 |   |   |

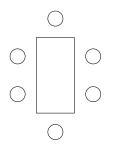
2. Here is part of a sequence of patterns made from circles.

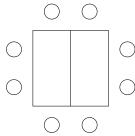


| Pattern number    | 1 | 2 | 3  | 4 | 5 |  |
|-------------------|---|---|----|---|---|--|
| Number of circles | 6 | 8 | 10 |   |   |  |

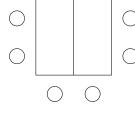
Turn over for more questions and answers

3. Here is part of a sequence of patterns made from rectangles and circles.



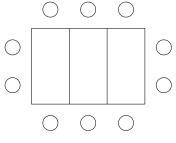


Pattern number 1



Pattern number 2

In the space, below draw Pattern number 4

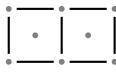


Pattern number 3

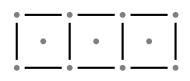
4. Here are some patterns made from dots and sticks.



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 numb                        |    |    |   | 1     | 2        |         | 3       | 4 | 5  |    |    |
|---|---|----|-------------------------------------|----|----|---|-------|----------|---------|---------|---|----|----|----|
|   |   |    | Number of do                        |    |    |   | 5     | 8        |         | 11      |   |    |    |    |
| Answers<br>1a) $2a$ $2a$ $3$ $0$ $0$ $0$ $0$ $0$ $4a$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ |   |    |                                     |    |    |   |       |          |         |         |   |    |    |    |
| 1b) Pattern number  | 1 | 2  | 3                                   | 4  | 5  |   | 2b) P | attern i | number  | : 1     | 2 | 3  | 4  | 5  |
| Number of squares   | 8 | 11 | 14                                  | 17 | 20 | ] | Num   | per of   | circles | 6       | 8 | 10 | 12 | 14 |
|   |   |    | b) Pattern number<br>Number of dots |    |    |   | 2 8   | 3<br>11  | 4       | 5<br>17 |   |    |    |    |