Grade 4 Assessment Task

Name:〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰〰 **Date:**〰〰〰〰

Continue the pattern

1. 2, 4, 6, 8, __, __, ___
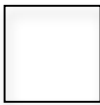   Describe the pattern you found

2. 3, 6, 9, 12, ___, ____, ___
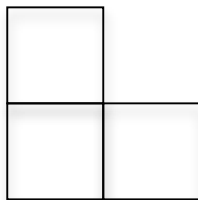   Describe the pattern you found

3. 1, 2, 4, 8, ___, ___, ___
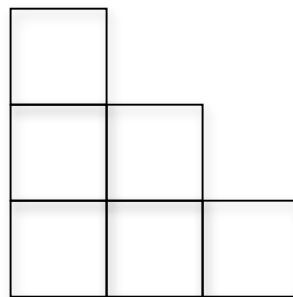   Describe the pattern you found

4. The village of Roses is known for its beautiful gardens. The gardens are built in a very interesting pattern. The first 3 gardens are shown below. The Norris family wants to build a very large garden in their backyard. They have enough room for an 8 plot garden. What is the area of their garden? What is the perimeter?

1 plot   2 plot

3 plot

Describe any patterns you see as you solve the problem.

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Solution: Here is a sample table that students might use to solve the problem.

Plot	Area	Perimeter
1	1	4
2	3	8
3	6	12
4	10	16
5	15	20
6	21	24
7	28	28
8	36	32

An 8 plot garden would have an area of 36 square units and a perimeter of 32 units.

Some students may need to build the gardens to answer the question. This indicates that they need more experience with making a table and finding a pattern.

Describe any patterns you see as you solve the problem.
The number of rows in the garden is the same as the plot number.
Each row in a garden has one more square than the previous garden.
The area of the plots is the sums of consecutive numbers. For example
Plot 2: area = 1 +2 =3
Plot 3: area = 1 + 2 + 3 = 6
Plot 4: area = 1 +2+3 +4 = 10
.
.
.
Plot 8: area = 1 + 2+3+4+5+6+7+8 = 36

The perimeter increases by 4 each time.
The perimeter is the plot number times 4.
The perimeter is the same as if the entire square were filled in.