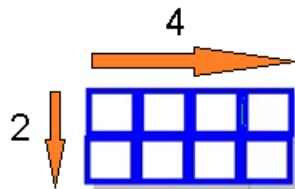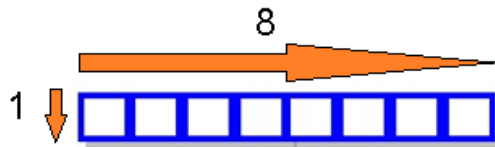# Factors and Multiples

Use arrays to find all the factors of 8.

Make as array with 8 squares

This array contains 2 rows of 4 squares each. So, 2 and 4 are both factors of 8.

Make a different array with 8 squares.

An array with 1 row of 8 contains 8 squares. So, 1 and 8 are both factors of 8.

So, the factors of 8 are: 1, 2, 4, and 8.

Grade 4

List the first twelve multiples of 6.

Multiply 6 by the numbers 1 through 12.

List each product.

1 × 6 = 6	7 × 6 = 42
2 × 6 = 12	8 × 6 = 48
3 × 6 = 18	9 × 6 = 54
4 × 6 = 24	10 × 6 = 60
5 × 6 = 30	11 × 6 = 66
6 × 6 = 36	12 × 6 = 72

So, the first twelve multiples of 6 are:

6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72

A factor is a number multiplied by another number to find a product.

For example, 4 and 3 are factors of 12. The number 12 is a multiple of 4 and 3, because 4 × 3 = 12.

Grade 4

<u>Examples:</u>

A- Use arrays to find all the factors of each product.

1) 24

1, 2, 3, 4, 6, 8, 12, 24

2) 35

1, 5, 7, 35

3) 48

1, 2, 3, 4, 6, 8, 12, 16, 24, 48

B- List the first twelve multiples of each number.

4) 6

0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72

5) 8

0, 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96

6) 12

0, 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144