# Math Connections for Parents

Welcome to Second Grade Module 6!  In Module 6, students will begin learning the foundation for multiplication and division in grade 3.  Students will make equal groups with manipulatives, then with drawings.   They will put their equal groups in rows or columns, and make arrays that relate repeated addition to rectangles.  Students will also learn more about doubles and even numbers.

## KEY STANDARDS

- See if a group of objects is odd or even by pairing objects or counting them by 2s.
- Write an equation to show an even number as a sum of two equal addends (e.g. $4 + 4 = 8$)
- Use addition to find the total number of objects in a rectangular array.
- Write an equation to express the total of the array as a sum of equal addends (e.g. $3 + 3 + 3 = 9$)
- Partition a rectangle into rows and columns of same-size squares
- Count to find the total number of squares in a rectangle.

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### Important Words and Concepts

- Array:  arrangement of objects in rows and columns
- Columns:  vertical groups
- Rows:  horizontal groups
- Even number:  whole number whose last digit is 0, 2, 4, 6, or 8
- Odd number:  number that is not even
- Repeated addition:  $2 + 2 + 2$
- Tessellation:  tiling of a rectangle with no gaps or overlaps
- Whole number: 0, 1, 2, 3,…

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### Sums and Differences to 20

Students continue to work on mastering addition and subtraction facts from 0-20.  Students will review doubles facts this module.  Continue to work on the basic facts, as these will lay the groundwork for multiplication in grade 3.

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**Graphics and Strategies you may see…**

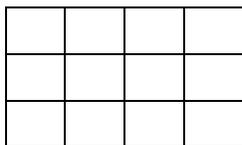Students will make math drawings to show equal groups of objects:

Then, students will arrange the objects in **arrays** with **rows** and **columns**:
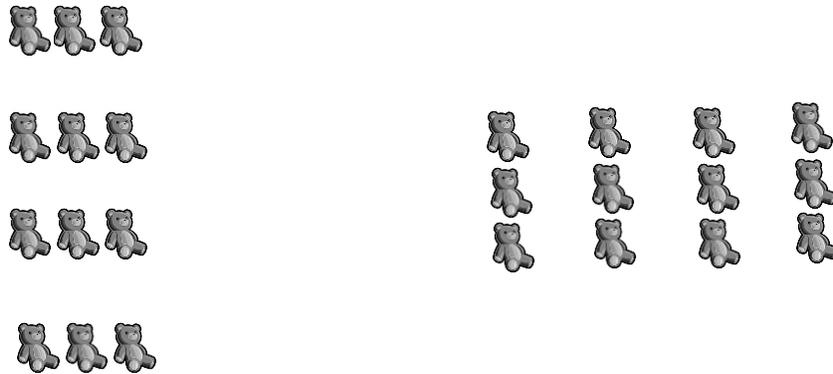
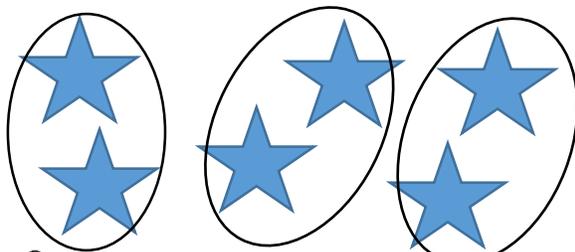**Arrays** will move from pictures of objects, to using rectangles with squares. Students practice **repeated addition**, which will prepare them for multiplication in grade 3:

4 + 4 + 4 = 12

3 + 3 + 3 + 3 = 12

Students will pair the objects to tell if they are **even** or **odd**:

6 is even!

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